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Left to their own devices: A technosocial ethnography of penal electronic monitoring in Scotland

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MSc., B.A.

Submitted in fulfilment of the requirements of the

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Abstract

This thesis explores how digital technology is embedded in penal practices and experiences in Scotland. While the role of digital technologies in the criminal justice system and the datafication of penal practices are becoming growing areas of interest within criminological research, there remains very little research into how such databases, assessments, devices, and connections sink into the texture of everyday life and impact experiences of punishment. This thesis ethnographically explores such experiences through a particular form of punishment that brings the surveillant and technological aspects to the forefront: penal electronic monitoring (EM hereafter), a seemingly progressive alternative to prison which entangles people in its own distinct systems and digital infrastructures of diversion. Thus, the aim of this research is to untangle the networked governmentality of EM in Scotland to better understand how digital technology is used to punish people. Rather than evaluating how EM can be expanded or improved, I explore the more fundamental questions of what EM is and what it does; in other words, what is going on beneath the façade of apparent technological simplicity, neutrality, and straightforwardness? This study seeks to make visible the hidden processes, practices, and powers involved in ‘penal surveillance’ through an ethnographic exploration of EM.

Based on 13 months of ethnographic fieldwork, including participant observation with EM Officers who worked for the private sector company that provides EM services in Scotland and interviews with people who were subject to EM, this thesis digs into the situated, relational, and constrained experiences of both being monitored and doing monitoring. Drawing upon ways of thinking from Science and Technology Studies, and actor-network theory, I explore the entire system of circulating relations that make up EM including not just the people, but also the objects, things, places, spaces, and narratives that interact in everyday contexts and distribute power, reflect governance, and construct subjectivity. This reveals EM as a messy and heterogenous network of relationships and as a set of enacted and intimate performances embedded in everyday contexts. The thesis uncovers the surprising and strange ways that technology shapes our penal actions, thoughts, and experiences as well as how penal contexts shape technology. As penal surveillance data flowed and converged from afar to the computer screens at the Monitoring Centre, the system software generated what I have termed ‘system narratives’ in order to efficiently sort through and resolve the flurry of information needing processed. Yet, these simplification techniques did not just project some external notion of reality, but instead actively reconstituted narratives of reality that were interpreted as more reliable and

quantifiable than that of untrustworthy humans. EM is neither the product of machine automation nor human discretion, but a messy combination of both forces. By spending time with both monitored people and those who carry out monitoring-work, which are seemingly pitted as oppositional experiences, there was a shared balance both had to negotiate between discretionary powers and the experience of constraint proffered by this distinct form of connectivity. EM felt less like a hegemonic and totalising punishment and more like a series of small, latent, accumulated moments that gripped people in different ways. Lastly, focussing on the communicative, representational, and bodily aspects of digitally mediated punishment reveals how EM changes penal supervision through the material, embodied, and digitised ways that surveillance data and information leaks out.

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Author declaration

I declare that, except where explicit reference is made to the contribution of others, that this dissertation is the result of my own work and has not been submitted for any other degree at the University of Glasgow or any other institution.

Printed Name: Ryan Casey

Signature:

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Chapter One: An Introduction

Before undertaking the research documented in this thesis, I worked as a coordinator for a criminal justice agency in New York that primarily involved collecting and tracking data about risk. I spent my work day running back and forth across the street from my drab office space, filled with stacks of musty paper and the sound of flushing toilets as people were constantly being drug tested, across the way to the Queens County Criminal Court, through metal detectors and pat-downs, to the basement offices and court rooms that formed part of the various drug and mental health court treatment programmes offered by the state. I always carried thick stacks of paper under my arm, consisting of the many perfunctory surveys I had to administer to people covering everything from demographic information, to the frequency of sexual intercourse, to childhood trauma, to ‘criminal personality’ hypothetical statements. The treatment courts used a post-plea adjudication model, meaning that the people I surveyed were in a liminal state of being in the community and having their charges cleared but were one misstep away from Rikers Island if they did not comply with their mandatory treatment programmes. I was just another hoop they had to jump through in order to avoid prison. Some of the completed surveys were sent away to external evaluators or run through commercial software, others I calculated by hand in order to determine a score.

My job was primarily about tracking. I had spreadsheets documenting who was categorised low, medium, and high risk; who needed to be assigned another CBT workbook; different colours indicating who was wearing a SCRAM tag, who was undocumented, and who was receiving medically assisted treatment. I also tracked recidivism and deaths, sometimes searching for a single person’s name across three web browser search bars at once: court dockets, inmate look-up, and obituaries.

I say all of this because the nature of this work and my experience of doing it have very much shaped how and informed why I have done this research. Under the guise of being a ‘progressive’ alternative to prison, I saw how people could become entangled in these systems and infrastructures of diversion and I wanted to better understand what goes on within them. Electronic monitoring is one amongst many of these kinds of so-called alternatives and while many of these systems intimately rely on digital infrastructures and tracking, electronic monitoring brings the surveillant and technological nature explicitly to the forefront. Therefore, this is a study not just about punishment, but also about how technology mediates punishment.

Research background and summary

This thesis provides new insights into how digital technology is enacted as a form of punishment in Scotland. This involved ‘following’ data produced by electronic monitoring (EM, hereafter) systems and the construction of realities across different sites and interactions of those involved in both carrying out this work and in being subject to this form of punishment. This thesis digs into the situated, relational, and constrained experiences of both doing monitoring and of being monitored. EM is too often framed in quantifiable terms concerned with its cost-effectiveness, with compliance rates, and with recidivism. Rather than ask how it can be expanded, this research gets at the more fundamental questions of what it is and what it does; in other words, what is going on beneath the façade of technological simplicity, neutrality, and straightforwardness? This study aims to make visible the hidden processes, practices, and powers involved in ‘penal surveillance’ through an ethnographic exploration of EM.

Research question(s) and aims

The aim of this research is to untangle the networked governmentality of penal electronic monitoring in Scotland to better understand how digital technology is used to punish people. In order to meet this aim, the thesis seeks to answer three broad research questions:

1. What are the relations between people and penal surveillance technology?

This question is focussed on exploring the connections between different people, things, objects, spaces, and places that enact and form part of the doing of and experience of EM. I aim to explore the diversity of relations between all of the different people and objects involved in EM by adopting a flexible and mobile research methodology.

2. How do differently situated actors experience the impact of EM?

This question is focussed on understanding what it means to monitor and how this work is enacted, as well as what it means to be monitored and how being subject to EM is experienced and talked about. I aim to use observational and interview-based methods to explore these experiences and how they were shared with me.

3. How does EM change penal supervision in the community? How is surveillance data represented and communicated throughout the network?

This question is first asking whether and, if so, how EM impacts penal supervision. I have set out to answer how surveillance data is represented and communicated across and outside of this monitoring system. I aim to ‘follow’ the data in order to determine how it is represented via social and technological processes and communicated at different places or in different mediums.

Note on terminology and narrative

This study is situated at the intersection of punishment and surveillance, which for the purposes of this study, should not be separated out as two distinct aspects, but rather, thought of as interlocking dimensions of the EM experience. It is also why EM is synonymously referred to as ‘penal surveillance’ throughout the thesis as a way of expressing this.

Perhaps more strikingly, I made the decision to remove the specific name of the private sector company responsible for providing EM services to Scotland. I just call this organisation ‘The Company.’ Part of this decision was stylistic, as The Company’s name is yet another acronym in a series of acronyms characteristic of administrative, managerial, corporate systems. Admittedly, there is also something poetically Orwellian about calling The Company by this name, continually reinforcing and reminding the reader of the private sector arrangement. Part of this decision was also political. From justice services, to security personnel at airports, seaports, and shopping malls, to the securitised transfers of people, monies, and goods, The Company’s logo and name bombard contemporary society and serve to further advertise their reach. I want this thesis to be one less space where that happens. This decision was also practical, given that some research participants were monitored by or worked for different private companies that held earlier contracts for EM in Scotland. The name of The Company does not matter as the logo on staff lanyards changes every couple of years, but the people and practices remain much the same. The findings in this thesis will reflect a very specific period with a specific company, but I hope and will argue that my analysis has wider and enduring relevance.

Structure of thesis

This current chapter, **Chapter One: *An introduction***, introduces the context, background, aims and objectives, and contribution of this study. This chapter situates how and why I came to undertake this research, the key arguments developed as a result of carrying out this research, and introduces its original contributions to knowledge.

Chapter Two: *Making sense of electronic monitoring*, includes an overview and literature review to situate different ways of knowing EM. This includes analysing the trajectory of penal technology developments as well as the historical and legislative contexts of EM in Scotland including the scale and scope of its use. I argued that this project was timely due to the recent introduction of new legislation¹ in Scotland that will extensively expand the use of EM as well as the use of newer and more intrusive EM technologies such as GPS which raise important questions about privacy and proportionality. This chapter also includes a review of academic research and literature on EM, in which I identify four particular paradigms of research on the topic that have contributed to the larger body of knowledge on EM in different ways. While EM as a topic cannot exactly be considered under researched, I argue that there are some epistemological and ontological assumptions or patterns across many ways of knowing EM that continue to limit our understandings of it as a ‘technosocial’ punishment (Brown, 2006).

In **Chapter Three:** *Retheorising penal surveillance*, I outline the ways I use and refine theories and concepts to situate ways of exploring EM. The structure of this chapter outlines Foucauldian, poststructuralist ways of thinking critically about punishment, surveillance, and governmentality, but also challenges the confines of this way of thinking by integrating into the discussion my interpretations of theories and concepts from Science and Technology Studies and actor-network theory. By combining and building together different aspects of these theoretical approaches to research, new ways of thinking about power and technology emerge. I outline the lineage of Science and Technology Studies and actor-network approaches to research which are gradually becoming more familiar to criminological research but still remain on the periphery theoretically and methodologically. Amidst theories of power, linked with the concepts of governmentality and active subjectivity, there is often a normative and/or neutral view adopted towards the role and value of technologies. Yet, in breaking these concepts open and combining them with additional ways of thinking informed by actor-network theory, I set out new ways of studying and thinking about the relationships between power, punishment, and technologies.

The following chapter, **Chapter Four:** *Methods, reflections, and being the familiar stranger*, details my methodology and methods of data collection and analysis. The first

¹ The Management of Offenders (Scotland) Act 2019 was passed by the Scottish Government on 30 July 2019 which has expanded the scope of the use of penal EM amongst other changes to the criminal justice system.

section on methodology acts as a bridge between my research objectives, theory, and fieldwork. It outlines how I put theory to work in fieldwork practices, which has been informed by two broad schools of thought: Chicago School and actor-network theory ethnographies. In analysing the strengths of these two approaches, as well as discussing their limitations, the concepts of mobility, multiplicity, thick description, and mess anchored my thinking throughout fieldwork and data collection. This chapter then goes further into the participant observation and unstructured interviews carried out as data collection methods. For each of these, I reflect on the literature that informed each of these methods, their significance, the negotiation of access/recruitment (how I got ‘in’ and how I was kept ‘out’), and reflecting on the ethics of each method and the research process in general. The last section of this chapter includes a discussion of how I analysed the data by ‘plugging in’ and creating new assemblages of knowledge (Jackson and Mazzei, 2012).

After these chapters, the next three detail the findings from this research. **Chapter Five:** *‘Confirmed by default’: System narratives and networked penal surveillance* identifies the ways in which different people and technologies in this system of penal surveillance come together and relate to one another. The Company relied on simplification processes to tell them what was happening elsewhere in the network which meant it constructed versions of events that then went on to circulate further afield and inform decision-making. Yet, these ‘system narratives’ were often over-simplified or sometimes fabricated in order to distil down a definitive and clean version of what happened. Queues, colour-coding, ranges, grace periods, and ‘default’ confirmations were all different techniques and technologies used by The Company to efficiently sort through and resolve the flurry of surveillance data that flowed up-stream to their centre of calculation. Yet, techniques and technologies did not just simplify some external notion of the ‘real’ EM but actively constituted and enacted it as a practice. Importantly, such narratives often went beyond just describing situations and instead, reconstituted versions of reality that were interpreted as more reliable and quantifiable than that of untrustworthy humans. As differently situated people and technologies connected with one another, they had technosocial effects that were the product of both machine automation and human discretion.

Chapter Six: *The constraints and intimacies of penal surveillance in everyday life*, unseats the narrative of EM as a better-alternative, automated, and clean form of punishment. The findings of this chapter primarily seek to break open the research question of how differently situated actors experience and/or enact EM, which speaks to the everyday practices and rhythms that were reconfigured by this distinct digital connection. By

focusing on what it was like to be monitored and what it was like to do monitoring, the chapter reveals the interrelations and intimacies between two seemingly oppositional experiences. In some ways, both the monitored and the monitors were left to negotiate a variety of constrained freedoms which came to define their experiences of penal surveillance and were deeply embedded in their everyday lives and practices. EM felt less like a hegemonic and totalising punishment and more like a series of small, latent, accumulated moments that gripped people in different ways (and at different times of the day/night).

Chapter Seven: *Through a glass, darkly: Power, representation, and the mystification of penal surveillance*, is the final findings chapter. It explores and addresses the question of whether (and if so, how) EM changes penal supervision in the community. By exploring how penal surveillance is represented by different actors and the ways in which penal surveillance data is communicated within and outside the network, I argue that EM reconstitutes the community punishment experience in different ways, but that the divisions between digital supervision and other forms of more human-centred punishment are not clear cut. The wearability of EM and its characterisation as a form of physical punishment is a unique and important point. Yet, the mechanics of power identified in this chapter resonate with those of other forms of punishment such as micro-penalties, mesh-thinning, normalisation, and regulation (Foucault, 1977; Cohen, 1979). The ways EM changes punishment then are through capillary powers of digitisation and abstraction, the discretion of monitors, the commercialisation of justice, and the intimacy and fleshiness of the EM experience. The system narratives generated within these relations are crafted into reports and circulated further afield on the peripheries and even outside of the network, leaked out in the form of employment disclosure and background checks, by local neighbourly gossip, or by the information communicated by the material form of the tag itself. These communicative, representational, and bodily aspects of digitally mediated punishment make visible the hidden ways that EM changes penal supervision. These findings undo the veneer of neutrality, straightforwardness, and cleanliness that is often associated with technological solutions.

Finally, **Chapter Eight:** *Conclusion*, provides a reflective discussion out the optics of EM and power, a summary of the thesis, and reviews the original aims and research questions set out in this chapter while considering the limitations of this research and possibilities for future projects.

Contribution of thesis

A major contribution of this thesis will be to the body of scholarship on penal electronic monitoring and the intersection of punishment and surveillance more broadly. Both Gacek (2018) and Berry (2019) have recently studied EM in the United Kingdom, although focussing on different aspects than what will be covered here. These studies have explored the nature of EM through the lenses of carceral territory and benevolent surveillance and will be analysed in greater depth in the following chapter. This thesis constitutes the first in-depth immersive study focussed on multiple perspectives of EM including those who do monitoring and those who are monitored, and in doing so, cracks open the ‘black box’ of what EM is about in rich detail. I situate EM as a heterogenous and messy network of relationships, and as a set of enacted and intimate performances embedded in every practices, and as a ‘fleshy’ bodily punishment (Mol and Law, 2004: 43). By drawing on different ways of thinking about and studying how punishment is mediated by digital technologies, this thesis reveals the – at times - surprising, less obvious, and strange ways that technology shapes our penal actions, thoughts, and experiences, as well as how penal contexts shape technology. In so doing, the thesis contributes to debates in criminology about the expanding role of digital technologies in the criminal justice system and the penal character of electronic monitoring.

This thesis also makes an original theoretical and methodological contribution to criminological research by drawing upon ways of thinking about the world, largely informed by Science and Technology Studies and actor-network theory which are not yet integrated into mainstream ways of thinking about crime and punishment. By putting to work a ‘technosocial’ approach to research, I demonstrate how we can see past EM as a mere tool, and as a panacea to social problems, which can expand our understandings of digital systems and penal technologies more broadly (Brown, 2006). EM constitutes a whole system of relations, a constant circulation of people, objects, things, places, spaces, and truths which are enacted in everyday contexts but which also distribute power, reflect governance, and construct subjectivity.

Lastly, I make an empirical contribution to the growing criminological literature on the intersection of data, control, and surveillance. By ‘following’ penal surveillance data across the EM network, I demonstrate how it is constantly renegotiated, how it fractured, solidified, accumulated, and stabilised. Sometimes penal surveillance data contradicted itself, fabricated narratives, said too much or not enough, or overrode common sense. This

builds on Nellis' (2018b) work on coercive connectivity and the relationship between digital exposure and digital exploitation, but it also speaks to broader criminological research on datafied justice and ways that these digital traces live on and can cause harm (see Brayne, 2014, 2017; Hannah-Moffat, 2019; Wood, 2020; Ugwudike, 2020). This is a powerful thread of research findings that reveals the persuasiveness, breadth, and longevity of penal surveillance data.

Chapter Two: Overview and Literature Review

Introduction

As a sarcastic critique of the formulaic literature review, Stan Cohen (1985: 4) once wrote, ‘Now is the time for the obligatory self-serving section about how irrelevant, misguided or plain foolish the existing literature on the subject turns out to be.’ That is not the purpose of this chapter. Instead, this chapter will situate different ways of knowing penal electronic monitoring (EM), ranging from broad discussions about penal digital technologies, to analysing the legal framework and scale of its use in Scotland, conceptual/ethical debates about the nature of EM, and more recent qualitative studies that are taking EM research in new directions. These different paradigms of research and knowledge address the penal character and viability of EM in different ways such as qualitative experiential accounts and deprivation-based analyses of what it is like to be punished. Thus, the main argument I put forth is two-fold: I argue that the EM experience is too often compared to the prison experience and framed within the ubiquity of the ‘carceral.’ Linked to this, the preoccupation with studying how EM is either an alternative to or alternative form of prison means that other aspects to EM go unrecognised and under researched, including the digital infrastructure underlying it and how such a digital network is involved in shaping experience. While some limitations or gaps in the current body of work are acknowledged, the main purpose of this chapter is to critically and thoughtfully engage with the existing canon of literature on EM, to identify the strengths of certain conceptual and methodological approaches, and to use these to inform the design of a project that will expand our understandings of EM and unseat our assumptions about technologically-mediated punishment.

Scholars have explored EM in a multitude of ways, building an impressive body of knowledge around and about the topic. Some have explored EM as a deterrent (Finn and Muirhead-Steves, 2002; Gainey *et al.*, 2000), a form of surveillance (Nellis, 2009; Berry, 2019), or as an instance of net-widening (Mainprize, 1992). Others have investigated how it has been used for people convicted of particular offenses: drunk driving (Courtright *et al.*, 1997), sexual offenses (DeMichele and Payne, 2008), domestic violence (Erez and Ibarra, 2007), or gang affiliation (Glaser and Watts, 1993; DeMichele and Payne, 2009; Deuchar, 2011). There is also a body of research around public perceptions towards EM (see Brown and Elrod, 1995; Budd and Mancini, 2017) and a smaller but important body of research around how EM is experienced by

those subject to it (Payne and Gainey, 1998; Martin *et al.*, 2009; Berry, 2019), those who are involved in enacting it (Hucklesby, 2011; Graham and McIvor, 2017), or both (Hucklesby, 2013; Gacek, 2018). This literature review attends to key themes and studies relevant to the development of my own research in order to critically and deeply engage with geographically local and global phenomena, subjects, frameworks, and methodological approaches that have informed the design of this study.

First, this involves a broad overview of the globalised development of penal EM as a multitude of technologies, trends, and controversies. This is followed by an analysis of the scale of and sensibilities towards EM in Scotland, as well as an in-depth discussion of the legislative history of EM. Moving on from these sections, I identify four key approaches to researching EM including: quantitative evaluations; conceptual and ethical debates; qualitative studies about perspectives and experiences of EM from different actors involved with it in their own ways including family members of monitored people, EM officers, monitored people, social workers, Sheriffs, researchers, etc.; and finally, a broader body of work around the carceral and the pains/deprivations of punishment. I argue that these ways of knowing EM are important for understanding different experiences, but there are also some open empirical questions that remain. In this way, I seek to unseat the narrative of EM as simply a prison alternative and to instead reimagine it as a system of socially *and digitally* embedded penal surveillance. This critical review is being conducted in order to establish an informed, relevant and thorough beginning for this study, related fieldwork, and beyond.

1. Global history of EM

Although there were research experiments being conducted in the 1960s-70s by behavioural psychologists and computer scientists with tracking technologies (often funded by the US military), the first ever operational use of EM was instead inspired by a Spiderman comic strip in a local Albuquerque (United States) newspaper in 1977 (Schwitzgebel, 1969; Delgado, 1969; Meyer, 1971). The person credited with this operational innovation was a district judge in Albuquerque, New Mexico who became interested in location monitoring after reading a Spiderman comic in which the villain Kingpin fixed a tag to Spiderman in order to track his movements so that his evil plans could be enacted without the superhero's interference (Lilly and Nellis, 2013). This district judge saw this tracking system as an innovative method to divert young people from prison, while satisfying public confidence in knowing their whereabouts (*ibid.*). The judge

collaborated with a local computer salesman, Michael Goss, to create a 'GOSSlink' device (radio-frequency) to monitor a person's proximity to a base location and in March 1983, without permission from the New Mexico Department of Corrections, sentenced several people guilty of violating probation to EM for the first time (Love, 2005 cited in Lilly and Nellis, 2013). Though his judicial superiors intervened when they discovered what the judge had done, the concept of the technology remained and expanded nationally throughout the 1980s (Renzema, 1992). Goss would go on to partner with a company that manufactured tags for livestock, which through a series of corporate acquisitions, is now owned by The GEO Group (Gable, 2015).

In the 1970s in the United States, there was a broader movement underway within state-level criminal justice systems to both facilitate rehabilitation and reduce prison populations. Much of this revolved around community sentence options and EM provided the means of enforcement many community sentence options were perceived to be lacking at the time. Florida created the first state-wide Community Control Program in 1983, which included the promotion of house arrest as an alternative to prison and it was in West Palm Beach that someone was (legitimately) sentenced to EM-enforced house arrest for the first time (Renzema, 1992; Lilly *et al.*, 1992). Kentucky also then created the first Department of Corrections-funded EM probation scheme (Lilly *et al.*, 1987; Lilly and Ball, 1990). Unlike the rogue 'GOSSlink' in New Mexico, the schemes in Florida (see Lilly *et al.*, 1992) and Kentucky (see Lilly *et al.*, 1987) were professionally approved, and in turn, evaluated and assessed. From there, EM expanded nationally and internationally, but this came alongside commercial and technological developments and expansion as well.

Jumping forward chronologically to the present, within the sphere of North American 'technocorrections' (although the commercialisation of technologies designed/adapted for punishment is arguably no longer just a North American phenomenon), there is a diverse array of technologies designed/adapted for penal surveillance and punishment more broadly (Lilly and Nellis, 2013: 23). Rudimentary radio frequency has largely given way to the allure of global positioning system (GPS)-based monitors, since GPS allows for real-time location tracking, operates on a more advanced systems infrastructure (satellite, WiFi, 3G/4G/5G), and the data collected is perceived as far more valuable for both law enforcement (i.e. CrimeTrax software) and private contractors (proprietary algorithms) (Kilgore, 2015; Paterson, 2013). While most of these worn devices can be cut off with household scissors in the event of an emergency, some newer models are equipped with a siren that can be activated by a remotely located monitoring centre in the event of a breach

or tamper or can be fastened to the body with a steel band (i.e. SecureCuff) to prevent tampering or removal (Track Group, n.d.). This last point is indicative of a new development whereas tags used to be 'nonremovable' only in the legal or symbolic sense, they can now be physically nonremovable even in the case of urgent emergencies.

Remote and continuous alcohol monitoring (RAM) is another way people can be monitored. RAM technology ranges from breathalysers to a variety of blood alcohol measuring devices that capture the composition of a person's perspiration (Kilgore, 2015: 7). One of the largest companies producing RAM devices, SCRAM systems, captures perspiration every 30 minutes and can pair with a smartphone app for real-time messaging and automated reminders (SCRAM, n.d.). Several other companies have also developed mobile apps that link with devices worn on the wrist resembling smartwatches (see E-Cell, n.d.). For E-Cell commercial packages, this includes features such as: the 'My Day N Court' app which relies on 'selfie'-style check-ins; a portable breathalyser that attaches to iPhones and Androids and transmits data by Bluetooth; and, secure payment systems for those that must fund their own punishment (*ibid.*).

Outside of wearable devices, New York City's Probation Department predominantly uses kiosk technology, which looks like an ATM machine but verifies check-ins via fingerprint scans and photographic evidence (DeMichele and Payne, 2009: 20). In fact, biometric verification is a growing trend in countries such as South Korea and the US; the verification process can involve anything from verbally repeating a random sentence, performing a task in front of a camera, to submitting fingerprints for scanning (Meyer, 2004; Cho and Bae Kim, 2013).

Outside of the ostensibly socially accepted devices used for penal surveillance, other digital technologies have been historically used (and sometimes continue to be used) in criminal justice contexts that have been internationally deemed ethically and legally problematic. One striking example is the penile plethysmograph (and vaginal photoplethysmograph) which is used in several countries including the US and Canada to measure sexual arousal (e.g. blood flow to genitals) as a means of assessment for adults and young people convicted of sexual offenses (see Clift *et al.*, 2009). Another striking example are electro-shock enabled devices worn on the body (e.g. belts, cuffs, sleeves) which have been used in countries such as the US and South Africa to shock and immobilise people that have been detained by police, sentenced in court, or moved within prisons (Yoon, 2003; ISS, 2016). These devices and practices surrounding them have been

condemned as ‘dirty’ technology (see Nellis, 2018a), have been banned in several jurisdictions, and seem more suited to dystopian criminological fiction and worse-case scenario warnings than the typical envisaging of EM (see McNeill, 2019b). Yet, the reintroduction and expansion of electro-shock enabled EM remains an ongoing topic in academic discussions about the potential of digitally-mediated punishment, as evidenced by the recent and controversial article by Bagaric *et al.* (2018) who posit electro-shock EM as ‘technological incarceration’ which they argue is the ideal solution to the problem of overcrowding in prisons and the purpose of bricks-and-mortar prisons altogether.

These examples are included to provide perspective on the complexities between technologies perceived as abhorrent and others deemed socially acceptable. For example, while penile plethysmographs may seem unethically intrusive, alcohol monitoring similarly measures biological fluids. An even more uncomfortable point to be made is that the academics calling for the use of electro-shock EM share the same objective of ending the use of prisons alongside penal abolitionist academics despite being at seemingly opposite ends of the political spectrum. Technological innovation is a series of trends, developments, experiments, and debates. Separating out what is socially acceptable versus unacceptable, what is innovative versus unethical, or problem solving versus problematic is messy, contingent, and grey. As will be further argued throughout this chapter, a critical criminological enquiry into EM requires an approach that can be attuned to messiness and multiplicities.

2. Scaled back Scotland?

At the time of fieldwork from October 2018 – November 2019, radio frequency (RF) was the only technology being used in Scotland for the purposes of EM. This is indicative of the arguably reserved approach and attitude the Scottish Government has adopted towards penal EM since it was introduced in the late 90s/early 00s. However, it perhaps also explains what Nellis (2014) has referred to as the ‘imaginative neglect’ of electronic monitoring which has implications for law making and the political context of EM. When the Scottish Government (2014) published its *Digital Strategy for Justice in Scotland* in 2014, EM was overlooked entirely despite being relevant to both digital and justice strategy. Perhaps EM was not considered sufficiently digital, nor especially punitive. In comparison to the advanced and controversial developments elsewhere in the world that were outlined in the previous sub-section, Scotland still primarily relied on a technology that might be perceived as outdated. Yet, radio frequency EM is a digitised information

and communication technology system used for justice purposes that transmits and codes complex information across a connected network.

Radio frequency EM involves an entire system of relations between people and things that will be discussed further in Chapters 4 & 5 but for the purposes of this overview of EM, it is important to highlight the basic elements of how it operates. For the person being monitored, it typically involves two devices. The most visible piece of equipment is the wearable tag, or Personal Identification Device (PID), which is adhered to a person's ankle with a Kevlar and fibre optic band covered in rubber (Scottish Government, 2017a: 27). The tag is considered tamper-proof and, moreover, it can detect tamper attempts which are automatically reported to the National Monitoring Centre (*ibid.*). In order to communicate location/presence information, the tag transmits signals to the second piece of equipment which is formally called the Home Monitoring Unit (HMU) or more colloquially called 'the box' or base unit. The box operates by establishing a signal detecting range that covers a limited area, and therefore, is installed where the monitored person is residing for the duration of their order. Together, these two devices can detect when someone, by way of the tag on their ankle, is within proximity to the box and when they are not. In the rare case of an 'away from' restriction or if the monitored person lives in a large enough house or type of accommodation that is made up of separate buildings (such as a hostel with a separate main office), more equipment might be needed to either simultaneously monitor the other person involved or to extend the reach of the box signal.

The box and the tag can only share what is essentially binary information: whether the person is present within the signal range of the box or is not. While this meets the needs for the standard issued 19:00 – 7:00 home curfew, it limits the enforcement of more complex license conditions and movement restrictions. However, the use of GPS and RAM technology for EM has been recently approved in Scotland (Scottish Government, 2019). The intent is that it will allow for more flexible license conditions, but it also comes at the expense of exposing monitored people to far more intrusive surveillance systems. It is envisaged that GPS tags will be physically like radio frequency (RF) tags with tamper-resistant transmitters worn on the ankle, however, rather than sending signals to a box, the tag will be connected to a satellite system, which will pinpoint someone's exact location by triangulation (Scottish Government, 2016a). These movements will then be plotted and tracked in real time. Remote alcohol monitoring (RAM) is also expected to be used in cases where sobriety is enforced as a sentence condition. Similar in appearance to the tags

worn for RF and GPS tags, RAM tags will be worn on the ankle in order to detect blood-alcohol levels in a person's sweat.

EM has been considered a marginally used disposal in the Scottish criminal justice system. In 2015-16, it was reported that there were just 1,646 new EM orders issued, in comparison to the 16,742 human/social work supervision orders issued that year (Scottish Government, 2017c). Yet, the numbers of EM orders have grown significantly in the last several years. For example, 2,840 new EM orders were issued in 2018-19 which is a 72% increase from 2015-16 (Scottish Government, 2020a). Considering the financial aspects of EM as well since it is contracted out to private sector companies, a contract had been awarded in 2013 (5 year duration plus extensions) valued at £13 million, whereas the subsequent contract in 2020 (~5 years duration plus expected 2 year extension) has been valued at a much higher £40 million (see Public Contracts Scotland, 2019). These figures point towards changes underway, as the use of EM in Scotland is no longer reserved, but instead, scaling up.

3. Situating EM in the Scottish criminal justice context: The changing of seasons

Penal electronic monitoring, in its current form, has been used within the Scottish criminal justice system for over 20 years (including pilot schemes). In 1998, it was piloted as a way to measure compliance with Restriction of Liberty Orders (RLO), a penal alternative to prison, when it could be justified that a person's behaviours were linked to 'particular locations or events' and therefore, could seemingly benefit from spatio-temporal restrictions (Scottish Office, 1996: para 9.13). Established through the 1995 Criminal Procedure (Scotland) Act and Crime and Punishment (Scotland) Act 1997, RLOs enabled courts to require monitored people to adhere to a curfew where they must stay in, or away from, specified locations for up to 12 hours a day over an extended period of time (McIvor and Graham, 2015). After the Scottish Executive held a consultation on the expanded use of EM and the pilot was evaluated as being successful, RLOs were introduced nationally in April 2002 (see Scottish Executive, 2000; Lobleigh and Smith, 2000). In 2016-17, RLOs made up just 12% of all community sentences issued that year (Scottish Government, 2018). Since then, the order has been used more frequently accounting for 19% of all community sentences issued in 2018-19 (Scottish Government, 2020a). Soon after its national roll-out, as part of the 2003 Criminal Justice (Scotland) Act, EM was eligible for

inclusion in conditions for parole, probation curfews, and Drug Treatment and Testing Orders.

EM was once piloted as a condition for bail in 2005 in order to reduce the high population of people in prison on remand. However, the evaluation results concluded that it had an insignificant impact on the remand population in prison so it was decided that it would not be introduced nationally (Barry *et al.*, 2007). Nevertheless, in the same year, the 2005 Management of Offenders etc. (Scotland) Act was passed which, amongst other justice policies, introduced a backdoor, early-release option from prison called the Home Detention Curfew (HDC) which was subsequently rolled out across Scotland in 2006. HDCs rely on EM as the primary (and usually only) license condition. This new penal option allows for people to be released from prison 4.5 – 6 months early on a tag (McIvor and Graham, 2015). However, in 2017 a man in Paisley was murdered and it was discovered that the person charged and convicted in connection with the case had been in breach of his curfew while on HDC (see BBC, 2018). In response to the immense media and public attention towards the case, the eligibility criteria for HDC were tightened. In 2019-20, only 196 HDCs were issued in total which, compared to the average rate of 1,400 – 2,000 HDCs per year reported between 2010/11 – 2017/18, demonstrates a very significant drop (Scottish Government, 2020b).

The probation system in Scotland was reorganised in 2011 following the 2010 Criminal Justice and Licensing (Scotland) Act. This was a turning point, or ‘season of change,’ in how EM was used (Graham and McIvor, 2017: 66). It became not just a community sentence in its own right, but also a penalty for those who have breached or are nearing the breach threshold of another community sentence. This has been heralded by some as a way of integrating EM into a wider ‘person-centred package of support’ that better aligns with transformations underway in Scottish community justice more broadly (see Scottish Government, 2016b: 7). However, it is also argued elsewhere that this constitutes an example of net-widening or up-tariffing, as it increases the punitive or controlling character of community sentences and subjects people to EM that otherwise may not have been subject to it (Smith, 2001; Dünkel *et al.*, 2017; Scottish Government, 2019; Belur *et al.*, 2020).

From 2011 through to late 2016/early 2017, there was a noticeable shift in the government's agenda to prioritise community justice alternatives amidst ongoing concerns about the rates of imprisonment in Scotland which have been and continue to be some of

the highest in Europe (Scottish Prisons Commission, 2008; Armstrong, 2018). In April 2017, under the *National Strategy for Community Justice*, EM was explicitly mentioned as a key means for achieving many of the rehabilitative aims, visions, and priorities set forth in the strategy (see Scottish Government, 2017b: 32).

Representing the culmination of shifting agendas and attitudes towards community justice and EM specifically, the Management of Offenders (Scotland) Act was passed in the summer of 2019. Amongst other key reforms, the use of EM under this new legislation has expanded significantly including the reintroduction of EM bail, ability to include EM within the array of possible conditions of other community sentences, as well as the introduction of new technologies that have already been described in the previous section including RF, GPS, and RAM (see Scottish Government, 2019). The implementation of these new options has been slowed by the ongoing global Covid-19 pandemic as Sheriff courts were temporarily suspended for some time in 2020 (see Scotland in Lockdown, 2020). However, they indicate a radical shift in Scottish penalty and zeal for integrating digital technologies into justice practices.

So far this chapter has outlined different ways of knowing and studying EM in practice: through global technological developments; through reflections on how EM is perceived in Scotland and a micro-analysis of how the technology works; and, an analysis of the legislation, statistics, and current events that shape and affect the penal landscape and enactment of EM. Running through all these sections thus far is a common thread of momentum. From the mid- to late '10s, there has been a shift in justice practices, attitudes, and appetites about the potential of EM as technologies are diversifying, policies are modernising, and budgets are growing. I argue that this momentum and change calls for further research into penal EM in Scotland and justifies the need for critically studying how it is experienced on the ground. The following sections in this chapter will engage with academic research in and around the topic of EM including both quantitative and qualitative knowledge, conceptual and ethical debates, the perspectives of differently situated actors, and broader research around subjective experiences of punishment. Finally, I will identify a cohort of recent studies that methodologically and/or ontologically take EM research in new directions, critically engaging with the strengths of these approaches, and how I have used them to inform and design my own research.

4. The settled narrative of EM

Just as the previous sections have outlined and engaged with the historical and legislative background of EM, this next section will engage with different ways of knowing EM through existing criminological academic research and literature. In particular, I focus on four main types of research about penal surveillance which covers a broad range of knowledge including qualitative and quantitative research, empirical and conceptual work, and studies that have contributed towards experiential understandings of EM from differently situated people. In this way, there is scope to consider the strengths and limitations of the findings and arguments of these studies. However, there is also scope for a meta-analysis of the ontological and epistemological strengths and limitations of these approaches to research as well. Across these different approaches, I argue that there are some settled assumptions about EM that are worth unpicking in order to move research on this topic forward and to gain a deeper and more complex understanding of EM beyond its comparisons to prison and as a socially and technologically embedded system.

The first section will involve a discussion of quantitative evaluative research, which sheds light on the metrics of EM and the distinctiveness of digitally mediated punishment. Following on from this, I will look at work on EM that falls under the category of conceptual or ethical debates, considering not just what those debates are about, but also how the ethical debate approach is largely founded on the notion of EM devices as neutral ‘tools’ adapted by people/institutions for different social or political purposes and the problem with this notion. The third section will cover a body of work around perspectives and experiences of EM from different actors involved in sentencing, assessment, and monitoring practices of EM (i.e. practitioners) as well as research into the experiences of people subject to EM or indirectly impacted by it (co-residents, family members, loved ones). These studies provide rich insight into how different people who have been monitored or are involved in the doing of monitoring make sense of their situated experiences. While the breadth of this type of research cumulatively illustrates how many people are drawn into EM, I argue more research could engage with this interconnectedness and the relations between differently situated people such as the relationship between those being monitored and those who do the monitoring. The last section will look at two approaches to researching experiences of being monitored: carceral-focussed studies and deprivation/pain-focussed studies. These are quite distinct on their own, but both rely on the prison for frames of reference. These literatures are relevant

to thinking about diverse experiences of punishment and the relationship between penal surveillance, prison, and the restriction of freedom.

4.1 Questioning the metrics of punishment

There is quite a large volume of research about EM that falls under the category of quantitative program evaluations and/or pilot studies. Evaluative studies of EM seek to assess the impact or effectiveness of specific implementations of EM in a particular jurisdiction in order to determine how well they ‘work’ (Pawson and Tilley, 1994). This type of research is founded upon a realist and pragmatist understanding of the relationship between criminological research and criminal justice practice; that changes to criminal justice institutions and practices can and should result from a stringent evaluation of their impact and effectiveness (*ibid.*). In the previous section, it was already demonstrated that evaluative pilot studies were integral to the national roll-out of EM across Scotland. Yet, the relationship between this type of research, findings about effectiveness, and continued use by the Scottish Government reveal contradictions. Across the various evaluation/pilot studies conducted in Scotland, the findings were, as summarised by Laurie and Maglione (2020: 687), that ‘EM was found ineffective, unlikely to make financial savings, perceived by professionals as an ambiguous instrument and with a detrimental impact on [...] families.’ The reintroduction of EM bail is an acute example of this, as it was scrapped after the 2005 pilot for demonstrating no impact on prison remand populations and yet, has reappeared in legislation in 2019 (see Scottish Government, 2019).

Methodologically, there is recognisable consistency in program evaluation research: local sites (except national pilot studies); measurable variables; (quasi) experimental groups; extant data; and, often, a statistical analysis to help situate raw data within a social context (*inter alia*: Roy, 1997; Roy and Barton, 2006; Padgett *et al.*, 2006). As a contribution towards the wider literature on EM, evaluative studies offer detailed and specific insight into the ‘realities’ of how EM is implemented as a penal order, as well as the relative success or failure of the programme to meet the specific goals of the authority or institution that uses it. The idea is to measure impact; to see how effective and efficient the new technology is in the regulation of people ordered to community supervision.

These intended goals and impacts may involve reducing the prison population, creating more community disposals, reducing the costs of punishment, developing more penal options that encourage re/integration, or, oppositely, the punitive toughening or up-

tariffing of community disposals. However, ‘inextricably linked’ with these larger scale goalposts of effectiveness is also the smaller scale metric of compliance (Bottoms, 2001: 89). Data about EM compliance is often readily available since it is calculated within digital systems and stored in databases. The myriad actions, behaviours, progressions, and engagement levels that are qualitatively assessed under human supervision are seemingly distilled down by EM supervision into a manufactured binary: compliance or breach. This is important because while EM relies on the same language of penal metrics found in studies and literature on other kinds of human-enforced punishment and/or rehabilitation, compliance here means something quite different. I will demonstrate this through a specific example.

Given the quantity of evaluation studies on or including EM, it is not possible to review them all in their entirety, nor is that the purpose of discussing this type of research. More so, I wish to highlight the strengths and limits of this line of enquiry and the kind of knowledge it produces. To do so, it is worthwhile to draw upon one of the largest sample-size studies of EM which was conducted in Florida (US) with 74,276 subjects who were sentenced to home confinement either with EM (RF or GPS) or, comparatively, without (Padgett *et al.*, 2006). The study found that people sentenced to home confinement with either type of EM were less likely to be revoked for violations (i.e. breach) than those without EM, and that RF technology was more deterrent in its effects than GPS technology (Padgett *et al.*, 2006: 79). These findings demonstrate that EM can have impact on a person’s behaviours and actions during the monitored period and that the type of technology used to monitor a person can influence outcomes. This form of compliance that was measured in the study is known within criminological literature as ‘short-term’ compliance, since it is strictly concerned with the period of time someone is on a tag, as opposed to the period of time afterwards (Bottoms, 2001; Robinson and McNeill, 2008). While there is value in this type of research, it is also simply more convenient to collect extant data on this than gather more longitudinal data on long-term compliance.

However, there are important issues here in relation to how compliance is calculated and then becomes a proxy to gauge the legitimacy and credibility of EM (Hucklesby, 2009, 2012). Breach thresholds for noncompliance can vary significantly depending on the agency, institution, and jurisdiction governing the implementation of EM. As has already been evidenced in the first few sections of this chapter, EM is a term for various forms of technology, meaning that a reported failure/breach could involve anything from consuming alcohol, to leaving the house after a certain time of night, to being within the

predetermined radius of a school zone. It could also mean technical failure to charge the device overnight if needed, pay an electric bill to keep the devices running, or the bill for the monitor itself if the EM programme in question is self-funded (e.g. for-profit).

Some of these examples are deliberate actions, some are minor mistakes, some are linked to issues of social inequality, and all are contextual. Yet, the process of numeration in which all of these become quantified and homogenised as violations generates a different narrative. The same could be argued for reported compliance as well where all that is known about the relative success or failure of EM is what can be counted or quantified for evaluation as opposed to any sort of indication of how people engaged with and lived with EM. Evaluation research is useful for reviewing specific implementations of EM, but more so for the relevance of my own research, it indicates the superficiality and artificiality of compliance data and highlights the very limited narrative produced by these penal surveillance systems.

4.2 Conceptual and ethical debates

The previous sub-section demonstrated that exploring the distinctness of digitally mediated punishment can help expand understandings of EM that go beyond metrics, inputs, and outputs. However, thinking about distinctness, it is worth considering whether or not EM constitutes something new, or perhaps, just a spin on older forms of supervision. This lends itself to a broader discussion about penal change. Daems (2008) has warned that we should avoid chronocentrism, in that change is not necessarily new; that living through change due to transformations in technology has been happening for centuries. This is also true in a more criminological sense. The penitentiary, the reformatory, indeterminate and intermediate sentences, and community supervision were all ‘innovations’ that resulted in major changes to the criminal justice system (Renzema, 2013a). Penal change must be understood against the backdrop of these broader social and technological transformations. While much of this topic will be further explored in Chapter 3, the old/new debate is an important one for EM. In his book *Pervasive Punishment*, McNeill (2019b: 162) argues EM is just a ‘digital form of a very old-fashioned ‘analogue’ practice’; that the network of connections and surveillance at work is but an amplification of the close-knit social circles and control mechanisms of probationary practices in Scotland going back to the 1960s.

Alternatively, others have highlighted that the surveillance, commercialisation, and nonhuman aspects of EM puts it into a new category, distinguishes it as a new penal

intervention, and more importantly, means that it produces a new experience for those subject to it (Nellis, 2009; Carney, 2012; Berry, 2019). Of course, these debates depend on situated contexts such as the conditions for how it is implemented, the specific technologies in question, as well as the historical background of punishment in particular places. Nevertheless, debates such as these persevere, oscillating between what are often binary generalisations about EM: old/new; care/control; punitive/rehabilitative; hard/soft; public/private, or diversion/net-widening.

One of the most frequently mentioned debates surrounding the use of EM is whether its purpose or nature is oriented more towards ‘mentoring’ (care) or ‘monitoring’ (control) (*inter alia* Nellis, 2013, 2014; Jones, 2014; Graham and McIvor, 2015). In other words, this ongoing debate considers whether EM contributes towards rehabilitation and positive change for monitored people or whether it simply serves the state to control prison overcrowding as a form of ‘pragmatic innovation’ (Kornhauser and Laster, 2014: 7). While most states seek a combination of both objectives, the continued practice of issuing stand-alone EM orders in Scotland has been criticised in several research reports as leaning more towards the latter since it involves using EM in isolation without other means of support (see Armstrong *et al.*, 2011; Graham and McIvor, 2015). Other debates situate EM within a wider debate about soft, moderate, or excessive punishment (see Garland, 2005; Loader, 2010; Jones, 2014). While it diverts some from prison, it is often argued that it ‘widens the net’ (Cohen, 1979), drawing more people into alternative forms of socio-penal control. For these reasons, Kilgore (2015), amongst others, argues that electronic monitoring is not an alternative to incarceration, as it is often described as, but rather, an alternative form *of* incarceration.

This ongoing approach to discussing and analysing EM reveals the importance of both contextualising research in the national/local politics, legal frameworks, and history in which it is experienced. However, it also highlights the importance of generalisability and conceptually thinking about the implications and consequences of this form of punishment across national borders. This is particularly relevant when considering the involvement of the commercial and private sector in creating and enacting EM, where two countries with different legal frameworks may have a contract with the same international service provider. These debates, like the administrative/evaluative research discussed in the previous section, are anchored in debates about the purpose(s) of EM, perhaps alongside what it is *intended* to do and how it is *supposed* to feel. The assumption underpinning both approaches to knowing EM is that EM is a mere tool, malleable enough to be applied in

different ways to meet different objectives. In fact, the term ‘tool’ pervades much of how academics typically define what EM is (see also Nellis, Beyens and Kaminski, 2013; DeMichele, 2014):

‘Electronic monitoring is just a tool and that like any other tool, it can be effectively used for the appropriate purposes and of course ineffectively used where it should never had been applied in the first place (Gainey, 2014: 345).’

This frequently used descriptor of EM is intended to emphasise that it cannot, in and of itself, solve penal problems and/or advance the social and political objectives that have already been mentioned. As a tool, however, it can be wielded or tweaked or applied in such a way that it can change outcomes.

This term and conceptualisation of EM as a ‘tool’ is epistemologically limiting. It renders penal surveillance as a singular object, like a piece of hardware, making invisible the systems, infrastructures, practices, and people that do the work of penal monitoring. Taking this even further, the common reference to EM as a tool in academic literature takes a very particular stance in exploring the relationship between the social and the technological. The technological and digital system mediating this form of punishment is materially and conceptually neglected, and instead, viewed as just a resource (i.e. tool) for appropriation by people in power (Haraway, 1991; Brown, 2006). According to Sheila Brown (2006), the technology-society relationship is a neglected area of research within criminology more broadly, and she goes further to suggest how it often manifests in theoretical binary oppositions and ways of understanding the world through boundaries. The ways in which we debate the ethics of EM and quantify its relative success or failure in such binary ways indicates a gap in knowledge and suggests that more attention should be directed towards efforts of understanding the role of technology in how we punish people.

The last point to be made in this section then comes from a broader understanding of criminological studies that critically examine the relationship between technology and punishment. This is relevant to my argument about conceptual/ethical debates about EM and the previous section about the metrics of punishment. Much of the research around EM in Scotland and the UK more broadly is uncritical and aimed at finding ways to expand, advance, and better use penal EM amidst larger contract budgets and massive legislative changes without consideration for how EM might reproduce systemic discrimination, obscure it, or produce new harms around data rights and civil liberties. As

mentioned earlier in this chapter, radio-frequency EM is neglected in policies around data justice in Scotland which does not mean that it does not require it but rather, that it remains unregulated. Broader research by Hannah-Moffat (2019) around algorithmic risk governance sheds light on the ‘hasty embrace’ of technological fixes and how digital systems produce new harms. Similarly, Brayne’s (2017) research around data-based police surveillance shows how it is embedded in power structures and can exacerbate inequalities by using numerical data to make things ‘appear’ objective. Linked to this, Ugwudike (2020) has recently explored predictive technologies to better understand how ostensibly ‘neutral’ technologies racialize risk and use datasets that reproduce bias. These studies indicate the need to investigate both the digital and discretionary powers involved in penal EM and question the broader assumption of technological neutrality rather than accept EM as a mere tool.

4.3 Isolated perspectives

The next body of research on EM that will be covered for the purpose of informing the design of this study is what I broadly refer to as the point-of-view approach, which encompasses qualitative studies that have analysed (and in many cases typologised) the multi-faceted experiences and sensibilities of differently situated people impacted by penal surveillance. These perspectives range from social workers, to EM officers and sentencers, to monitored people, their family members and co-residents, and academics who have subjected themselves to periods of EM for research. Each of these studies in isolation reveal important insight into EM as a phenomena and how different actors make sense of and are impacted by digitally mediated punishment. Yet, as I will go on to argue, the cumulative effect of this line of enquiry demonstrates the diversity and breadth of people who become entangled in penal surveillance and indicates that not only should we consider how much further this web of actors expands but also how the relations and connections between these actors are experienced.

While evaluation- and debate-focussed research emphasise the more intentional side of how EM is used, these more qualitative enquires emphasise how EM is perceived and/or used in practice. In fact, the exploration of ideologies and attitudes is a common thread amongst these kinds of studies. For example, Graham and McIvor (2017) explored judicial and community justice practitioners’ (Sheriffs, Criminal Justice Social Workers, EM Officers, etc.) sensibilities towards EM in Scotland through predominantly interview-based methods. While this study involved quite a varied research sample both in terms of

occupational role and geographic spread, a major finding was around regional ideologies and differences. The authors identify ‘localism’ as an important concept for how subjective, location-based attitudes towards EM can explicitly impact how it is used or whether it is used at all (McIvor and Graham, 2017). The authors do casually acknowledge this as discretionary power, for example, as certain Sheriffs exercised subjective powers to determine whether or not they wished to use EM as a community sentence option, how punitive the order ought to be, or customised the breach threshold to make it tighter or looser. However, I argue the role of discretion in penal surveillance goes beyond just being a geographical quirk of the Scottish approach to sentencing and requires far more critical engagement.

In fact, the theme of discretionary power can be found in studies of how EM is enacted at the operational level as well. In a study involving interviews with EM officers (predominantly the kind that pay house visits) in England, Hucklesby (2011) found that because of the isolated nature of work carried out by EM officers and because of the privatised arrangement of EM as a service, there was not so much a strong occupational culture amongst officers as there were more individualised work credos. This alone is a significant finding and indicates that the relationships between EM officers, and with their employers, may be a fruitful area for further exploration.

Hucklesby (2011: 66) identified a typology of EM Officer work credos that specifically take into account: officers’ views of monitored people; the amount of time officers spend in people’s homes; and the level of advice/information officers provide (Hucklesby, 2011: 66). The descriptions of each of these criteria are filled with emotive and discretionary language such as vulnerability, empathy, suspicion, judgement, doing their jobs thoroughly, and doing the bare minimum which indicate a crucial relationship between how EM officers perceive monitored people and the quality of their work (*ibid.*). Importantly, this research emphasises the vulnerability experienced, and in turn, discretion exercised by such officers who work nocturnal hours, in isolation, and in unpredictable settings. I argue this calls for more research into the relational dynamics of both doing monitoring and being monitored, in order to situate the perspectives and experiences of EM officers alongside those of monitored people as complex and emotional interactions.

There is a growing body of research which explores different experiences and dimensions of being subject to EM (*inter alia* Nellis, 2006; Hucklesby, 2009; Martin *et al.*, 2009; Kilgore, 2013; Payne *et al.*, 2014; Berry, 2019; Gacek, 2018). This will be discussed at

more length in the following section, but I wish to highlight a particular line of enquiry which reveals a new dimension of exploring the experience of being tagged but also comes with its own limitations. These are autoethnographic studies which include reflections from researchers with lived experience (see Kilgore, 2013) but also others who volunteered to be monitored for academic and/or political experiments (see Matheson, 2016; Martinovic and Schluter, 2018). The claims that can be made from studies - in which people volunteered to be tagged - must be seen as limited, given that they come from a place of significant academic privilege.

Martinovic and Schluter (2018) conducted such an experiment, in which one of the co-authors subjected herself to a 14-day trial of GPS-based EM in Australia in order to better explore the embodied experience of being subject to EM and mandated wearable surveillance technology. The researcher critically reflected on how her social identity and positioning meant the experiment could not adequately be compared to the everyday social experience of EM and therefore much of the analysis explores a different another dimension of being tagged. A focus on the visceral embodied experience revealed some of the interesting physical consequences of being subject to EM. This includes how it affects sleep, the ‘cumbersome’ feeling of the device on the body, and the midnight or mid-workday machine vibrations that notified the wearer of technical glitches or low signal (Martinovic and Schluter, 2018: 6). These physical impacts are often overlooked in studies that focus more on the social and interpersonal impacts of being subject to EM and are perhaps worth exploring in greater depth alongside other impacts. In the previous section, I argued that more attention should be directed towards understanding the role of technology and the nexus between the social and the digital. In this vein, there is scope to consider not just how people entangled in EM relate to one another but also how the material form and function of technological artefacts and processes factor into those relations as well.

The last actor perspective relevant to the design of this study is that of family members and co-residents of people subject to EM, which can involve monitored people being home for longer periods of time than usual, visits or spot-checks, and the installation of hardware in the shared residence (Aungles and Cook, 1994; Gibbs and King, 2003a; Martinovic, 2007; Vanhaelemeesch and Vander Beken, 2014). For example, in New Zealand, the reliance upon family members and/or co-residents was once acknowledged as a formalised ‘sponsor’ arrangement and although the terminology now is the more mild ‘relevant occupant,’ all co-residents of monitored people must still undergo criminal and traffic background checks (Gibbs and King, 2003a; Ara Poutama Aotearoa, 2020). Not only are

co-residents and family members legally involved in the administration of EM, but they are often socially and emotionally entangled in the everyday experience of it as well. This is important because it highlights not just how others become entangled in penal surveillance, but that the home-life conditions of EM make it distinct from custodial punishment.

It is argued that the role of those living with someone subject to EM is often invisible, as they ‘fall between the two spheres of domesticity, and law and order’ (Vanhaelemeesch and Vander Beken, 2014: 390). A growing body of research in this area reveals that EM can impact social relationships, intimacy, finances, and draw others into the role of the co-punished, co-punisher, or both (*ibid.*; Martinovic, 2007). In their study which involved interviewing co-residents and family members of people subject to EM in Belgium, Vanhaelemeesch and Vander Beken (2014) found that people in such circumstances were often relieved that their loved ones were out of prison and found ways to enjoy the quality time it afforded, but nevertheless acknowledged specific pressures and responsibilities that accompany living in the same house as someone subject to EM. Some co-residents curtailed their own freedoms in a show of solidarity, some took on far more housework, and others took on maternal, controlling roles (*ibid.*). That last point is important because these effects were predominantly experienced by women who took on a multiplicity of roles to manage their households and relationships, typically without much support or resources from monitoring regimes and/or the state (Aungles and Cook, 1994; Maidment, 2002; Gibbs and King, 2003a; Kilgore, 2013). As ‘home worlds’ and ‘institutional worlds’ are revealed to overlap as a consequence of penal surveillance, co-residents and family members, like monitored people, are often left to navigate the contradictory feelings of both being punished and being done a favour (Goffman, 1961; Staples and Decker, 2010).

To conclude this section, I have covered a range of studies that explore the perspectives and experiences of differently situated actors involved in EM and identified specific strengths in these approaches as well as potential directions for future research. However, as mentioned earlier, there is a compelling meta-argument to be made for exploring the relations between all of these diverse groups of people as a network and how their interactions are mediated by digital technology. For example, how do co-residents and family members interact with EM officers, or how do remotely located EM officers interpret what is happening in the homes of monitored people? These are questions about a system of relations and in moving beyond isolated accounts of interviews with different

actors, I argue there is value in being present for real-time interactions between these actors.

4.4 Prison and pain: Expanding beyond the limits

This section will cover studies that have explored the experiences of being subject to EM. In particular, I will cover two ways such experiences have been commonly explored or framed in research, which are on their own quite distinct from one another but as will be argued, share a similar limitation. The first to be discussed is the ‘carceral’ which links with human geography (sometimes referred to as carceral geography) and seeks to explore how the conditions of incarceration leak out into other aspects and spaces of society. In this sense, there are a number of recent studies that frame EM as a carceral experience or carceral space (see Gacek, 2018; Eife and Kirk, 2021). The second approach to be discussed is the ‘pains’ analysis which has been a historical and highly influential line of enquiry and framing device in penological research that identifies and organises experiences of penal deprivation including the pains of EM (see Payne and Gainey, 1998; Gainey *et al.*, 2000). Both ways of researching experiences of being subject to EM are relevant to the development of my own study as compelling and illustrative ways of researching punishment. However, I also argue that carceral comparisons and pains analyses have been so widely applied within criminological research that they dilute our current understandings of EM.

The ‘carceral turn’ is meant to denote the growing relationship between human geography, criminology, and place-sensitive research which seeks to identify and explore the expansion of carceral conditions both within, outside of, or adjacent to prison (Moran *et al.*, 2017). In many ways, this area of research de-centres the hegemony of prison by exploring the fluidities between different forms of social control and confinement, however, prison remains an unavoidable reference point. There is an undeniable relationship between both the carceral and EM conceptually, as well as prison and EM practically. In this sense, EM is situated within the broader ‘carceral continuum’ or ‘carceral archipelago’ as some people move between different systems of control in their lives (Shed, 2011; Foucault, 1977). A recent ethnographic study was conducted in Scotland by Gacek (2018) which explored EM as a form of carceral territory. The findings of this study focussed on the places and spaces of EM, especially the Monitoring Centre and its institutional practices but also the home spaces of monitored people, which Gacek (2018, *forthcoming*) argues, leaves people feeling coercively stuck in ‘portable prisons.’

Similar comparisons have labelled EM as 'virtual prison' (Roberts, 2004), 'e-carceration' (Kilgore, 2015), 'the electronic ball and chain' (Gibbs and King, 2003b), or 'digital jail' (Kofman, 2019). These carceral-focussed concepts emphasise the confining nature of EM, but I argue they also limit our understanding of it by using the dominating language and image of the prison to do so. In some respects, this comparison is politically important as some scholars look to subvert the branding of 'humane' and progressive alternatives to prison and instead highlight the role they play in entangling certain groups of people in a bigger carceral web (see Hamlin and Speer, 2018; Gurusami, 2019; Benjamin, 2019). However, carceral-focussed scholarship is nevertheless founded on its centrality to the prison and there are fundamental differences between being in prison and being subject to EM. I argue that, in relation to researching EM, the carceral frame of reference has value but it is also important to explore outside of that frame so as not to oversimplify experiences of EM.

In fact, Kirk (2020) argues that the 'carceral logic' of prison has transformed how people reflect on their experiences of being subject to EM, given its framing as an alternative sentence and constant comparison to prison sentences. For this reason, monitored people tend to downplay the difficulties of being subject to EM (*ibid.*). In order to explore what difficulties, or pains, might be experienced, I now turn to a related body of research that explores penal pains more broadly and how it relates to EM.

Sykes' (1958) original analysis of the pains of imprisonment emphasised the features of prison and the society within that can threaten one's sense of self and the response to relative deprivations of the punitive experience. It is founded on the notion that punishment is no longer marked by brutal bodily suffering (see Foucault, 1977), but that the modes of modern, 'humane' punishment retain certain deprivations and frustrating aspects thought to be 'just as painful as the physical maltreatment they replaced' (Sykes, 1958: 64). Sykes' (1958) work not only recognised the diversity and subjectivity of penal experiences but highlighted that the controlling environment created by the penal regime creates a certain commonality of experience, allowing for the generalisation and typology of 'pains.' The five original pains of prison confinement include: the deprivation of liberty; the deprivation of good and services; the deprivation of heterosexual relationships; the deprivation of autonomy; and, the deprivation of personal security (Sykes, 1958: 65 – 78).

Since 1958, an extensive amount of academic literature evidences that both custodial and noncustodial forms of punishment are associated with experiences of pain and deprivation, deriving from the punishment itself as well as the collateral consequences of penal intervention (*inter alia* Christie, 1982; Payne and Gainey, 1998; Gainey *et al.*, 2000; Crewe, 2011; Durnescu, 2011; Shammass, 2014; Hayes, 2015; Nugent and Schinkel, 2016; McNeill, 2019a). The pains analysis has been extensively applied to many forms of punishment and confinement as a subjectivist approach to understanding experiences of punishment, which prioritises accounts of punishment from the penal subject's own experience rather than the intentions/objectives set forth by the governing or sentencing authority. Similar to evaluation studies, the pains analysis gauges the impact of a particular form of punishment. However, as a qualitative enquiry, it is an assessment of impact from experience through various combinations of interviews with justice-involved people and sometimes ethnographic fieldwork.

The 'pains' analysis was once specifically a way to know more about life in prison (particularly for heterosexual men) but has since expanded as a way to explore the 'painfulness' of different forms of prisons/institutions, different community sentences, for various groups of people, and in different jurisdictions. Payne and Gainey (1998) adopted this framing device to explore the pains of EM in the United States. They identified the pains of: (1) associated monetary costs; (2) familial impact; (3) temptation; and, (4) the stigma of the monitoring equipment and shame arising from it (*ibid.*). The data from this study was later reused and analysed quantitatively rather than qualitatively (see Gainey and Payne, 2000). The findings were categorised slightly differently (shame, privacy, disruption, restrictions, work problems), but overall remained quite similar to the findings from the original qualitative study. However, the sequel study identified the additional pain of drug use, or interestingly, lack thereof (Gainey and Payne, 2000). Not only was enforced sobriety (the forbiddance of substance use) painful for some, but the constant suspicion of possible use and subjection to drug testing was also painful (*ibid.*). This latter pain resonates with a finding from more recent studies into the pains of penal supervision and waiting, in which people felt misrecognised and left in suspension (see McNeill, 2019a; Laursen *et al.*, 2020).

The pain that derives from stigma attached to the equipment is evident throughout academic research (Gibbs and King, 2003a; Murphy *et al.*, 2011; Kilgour, 2020). Some argue that stigma is not just a collateral consequence, but an intentional retributive feature of EM (see Renzema, 2013b). In the United Kingdom, someone cut off their own

monitoring equipment because the tag made them ‘feel like a dog’ and another person was assaulted by a group of people who assumed the monitored person had committed a sexual offense (Prison Reform Trust, 1997 cited in Gelsthorpe, 2007: 495). Furthermore, there are calls for more research to investigate how this painful experience may also be exacerbated by gender (see Maidment, 2002; Holdsworth and Hucklesby, 2014), as fashion and comportment are performed in different ways and would factor into how wearable technology is concealed.

A recent study by Kilgour (2020) takes the politics of penal surveillance even further to explore the material and visual aesthetics of EM technology such as how the form and function of the hardware can cause harm. This line of enquiry challenges researchers to consider the visual politics of wearable technology in the context of punishment that include but also go beyond the pain of stigma (*ibid.*). More so, this demonstrates how the physical impacts and embodied experience of being subject to EM may be explored, which aligns with the argument I made in the previous section.

Several of the pains identified in these studies overlap despite sentence and jurisdictional differences, particularly around the areas of stigma, autonomy, routine, privacy, time, and anxiety. For example, Durnescu’s (2011) study of probation pains in Romania and Hayes’ (2015) study of community sentence pains in England both identify stigma as distinct pains of the respective regimes of punishment. Yet, we also know that Payne and Gainey’s (1998) study of EM in the US does as well. While the ‘pain of deportability’ found by Ugelvik and Damsa (2018) in their study of foreign-national prison experiences is seemingly distinct since it focuses on a unique prison in Norway exclusively for foreign nationals, the feeling of living through profound uncertainty is found in several other pain-focussed studies as well (see Crewe, 2011; Shammas, 2014; Laursen *et al.*, 2020).

In their recent meta-analysis of the pains’ literature, Haggerty and Bucerius (2020) argue that the pains analysis has been so widely applied that its analytic usefulness has become diluted in some respects. I argue that the overlap and repetitiveness of findings from a number of diverse studies using this framing device may be indicative of such exhaustion. While it has broadened out, the pains analysis remains quite prison-centric, as originally conceived, and narrow in focus where other distinct dimensions of, for example, being subject to EM may be subsumed under larger aggregate categories of pain (privacy, intrusion, etc.). They may also be either ignored entirely because they might not be considered emotive enough to constitute a pain or not painful in the same way that

dimensions of being in prison are painful. On one hand, the ‘pains’ analysis emphasises the important, symbiotic relationship between the prison and EM and the carceral character of the house curfew experience. Yet, as I have already argued, there may be more to EM beyond it being an alternative to or alternative form of prison.

In agreement with Mike Nellis, one of the most prominent scholars on the topic of EM, digital surveillance is a distinct aspect of EM that remains under-explored, under-developed, and under-theorised (Nellis, 2006, 2009, 2018b). Experiences of surveillance, and specifically the technological and social dimensions of EM still merit further research, as they speak to known pains including privacy, but may also reveal new dimensions to the experience of EM.

Berry (2019) has conducted recent ethnographic research into EM in England, which involved courtroom observations and spending time with monitored people from the point of sentencing. While this study focusses exclusively on the lived experience of being subject to EM, Berry (2019) explored how monitored people made sense of being under a gaze and how they coexisted with the surveillance technologies in their lives. The analysis sheds light on different experiential aspects of EM including the mundane ways EM became habit in peoples’ everyday lives, how people actively reappropriated the sentence to work for them, and for others, and how different material aspects of the technology such as noise contributed towards an affective feeling of being unsettled (*ibid.*). Related to this, Mike Nellis’ (2018b) conceptual work in recent years has begun to further explore penal surveillance as a form of ‘coercive connectivity’ which not only departs from carceral characterisations of EM but highlights the global surveillance infrastructure and cultural drives for penal technologies. This sheds light on how to begin exploring the political dimensions of how EM gathers and transmits surveillance data, connecting people across a network.

Conclusion

This chapter set out to identify the strengths and limitations of different ways of knowing penal EM in order to establish an informed, relevant and thorough beginning for this study, related fieldwork, and beyond. This involved discerning where there were gaps in knowledge but also where there was emerging strong research in order to expand upon it and inform the design of my own research. The main argument from this chapter is that there has been a settled narrative around how EM is researched and written about, limiting

our understandings of it within the language and concepts of predominantly prison research. This has neglected the exploration of other dimensions of experience, including the digital surveillance infrastructure underlying EM and how such a digital network is involved in shaping experience. I have identified the surveillance aspects of EM as a fruitful direction for my research in order to dig deeper into the socially and digitally embedded network of penal surveillance.

The chapter began with an overview, which mapped a narrative of the globalised development of penal EM and the cultural contexts which have shaped its directions. This revealed EM as a multitude of technologies, trends, and controversies. Following on from this were two sections which situated the fieldwork in Scotland and assessed general sensibilities towards EM, the scale of its use, and its legislative history in the country. This overview sheds light on the changing landscape in Scotland and the noticeable momentum and embrace of EM from the mid- to late '10s, during which the national EM programme has received considerably more funding and been granted the power to use newer technologies with more affordances. I argue that this momentum and change calls for further research into penal EM in Scotland and justifies the need for critically studying how it is experienced on the ground.

Next, this chapter covered four key approaches to researching EM including: quantitative evaluations; conceptual and ethical debates; qualitative studies about perspectives and experiences of EM from different actors involved in penal surveillance; and prison-centric research around the carceral and the pains of punishment. I argue that these ways of knowing EM are important for understanding different experiences, but there are also some open empirical questions that remain. Much of the evaluative/administrative research around EM has been pragmatically concerned with the measurable outcomes of EM programmes but without critically engaging with what digitally measured compliance even means and the consequences of pervasive quantification. While the ethical and conceptual debate literature did in fact critically engage with these notions to an extent, they were often framed in a binary way where EM was either hard or soft, caring or controlling, or new or old rather than exploring its operational complexity or how it might be both (or neither). These debates also raise an important point about the analysis of digital phenomena and technologies in criminology which frame them as neutral tools, neutral data, and a cure-all for other problems. There is not consistent or explicit consideration for how the digital context actively plays a part in how EM is both enacted and experienced. Reviewing the cumulative literature on individual perspectives and experiences of EM

revealed that there is a system of relations involving many different people who become entangled in penal surveillance. The development of my own research will be significantly influenced by the notion of exploring these different relationships between people and technology. Lastly, I discussed the framing of EM as a carceral practice/experience as well as the strengths and limitations of a pains analysis. While both approaches have their own distinct ‘political purchase,’ neither fully account for other dimensions of EM that do not fit their frames of reference (Haggerty and Bucerius, 2020: 11). In turn, this largely confines our understandings of EM to its relationship to prison.

This chapter revealed that EM programmes are subject to the social, political, and cultural contexts of the jurisdiction they are implemented in. Going forward, there is a need for more research into EM that seeks to ask more than ‘what works?;’ that takes into account the other experiences and relations in a person’s life and examines more critically the power structures and governance of penal systems. While some limitations or gaps in the current body of work are acknowledged, the purpose of this chapter is more so to critically and thoughtfully engage with the existing canon of literature on EM, to identify the strengths of certain conceptual and methodological approaches, and to use these to inform the design of a project that will expand our understandings of EM and unseat our assumptions about technologically-mediated punishment. The next chapter will build upon what was outlined in this chapter as I outline how I use theory to gain a deeper and more complex understanding of EM as a socially and technologically embedded system.

Chapter Three: Retheorising penal surveillance

Introduction

Modern digital surveillance is as much an everyday social phenomenon as it is technological. In order to understand surveillance in a contemporary context, social and technological relations must be recognised not as separate but as ‘hybrid’ phenomena (Brown, 2006). The nature of contemporary life is defined by Bauman (2000) as ‘liquid modernity,’ in the sense that seemingly fixed institutions and structures are inclined to such constant and rapid change, that what was once solid becomes flexible and thus, liquefies. This perception of modern life is founded on notions of multiplicities, ambiguity, and ‘an infinity of improvement’ (Bauman, 2000: 82) which fuels not only innovation, but a demand for new ways of knowing and governing the population *en masse*. Alongside Lyon’s (2010) subsequent term ‘liquid surveillance,’ these concepts provide context for understanding changing forms of governance, the cultural appeal of monitoring and tracking technologies, the changing character of the late modern penal state, and ways in which statutory agencies and organisations enlist differently sectorised actors (private, commercial, etc.) in the ‘conduct[ing] of conduct’ (Foucault, 1982: 221).

The previous chapter highlighted that there has been a settled narrative around EM in which it has been too often and too exclusively characterised as either an alternative to or alternative form of prison. Drawing on different empirical literatures related to EM, I argued that other aspects of EM go unrecognised and under researched, including the digital infrastructure underlying it and how such a digital network is involved in shaping experience. Following on from this, this chapter seeks to situate how EM can be conceptually reframed as a socially and technologically embedded system of penal surveillance. I will situate the conceptual and theoretical perspectives I draw upon as part of this study in order to untangle the networked governance of penal surveillance.

This chapter will explore post-structuralist concepts and theories relevant to the sociology of punishment, particularly Michel Foucault’s (*inter alia* 1977, 1982, 1987, 1991) work on governmentality, surveillance, penal subjectivity, and power more broadly. However, I will also introduce concepts and theoretical principles from actor-network theory and Science and Technology Studies. Infusing these two ways of thinking about the world reframes the relationship between technology and punishment and opens up different ways of exploring the blurred boundaries between the social and the digital. Drawing on

theoretical principles from actor-network theory, and the broader area of Science and Technology Studies, this theoretical framework engages with the concepts of hybridity, network, heterogeneity, and constraint to move beyond the binary distinctions between the state/self, the public/private, and structure/agency in order to see how even the ostensibly straightforward distinction between, for example, being ‘in’ or ‘out’ of one’s house during curfew might be technically dismantled (see Chapter 5).

This chapter begins with an overview of Science and Technology Studies (STS) and the actor-network approach to research, since this theoretical perspective remains relatively marginal within traditional criminological research. The next part of the chapter reinterprets actor-network theory in relation to poststructuralist theory on governmentality, social control, and surveillance. I argue both the sociologies of punishment and technology are suited to studying mechanisms of penal surveillance power. Drawing upon concepts from both perspectives situates the study in a place to critically interrogate not just the social discourses of penal EM but to go further in suggesting a more radical epistemological and ontological shift attuned to ‘technosocial’ systems of relations and actions (Brown, 2006). Therefore, this framework is aimed at moving beyond the ‘tools and tyrants’ of monitoring regimes and towards ‘the spirit that animates surveillance, the ideologies that drive it forward, the events that give it its chance and the ordinary people who comply with it’ (Bauman and Lyon, 2013: 8).

1. Overview of technosociality

Associated with the sociology of knowledge, Science and Technology Studies (STS) arose as an interdisciplinary subject in the 1970s and 80s that linked together the sociologies of technology and scientific knowledge, in order to establish a new area concerned with the social construction of science and technology (MacKenzie and Wacjman, 1985; Bijker *et al.*, 2012). Influenced by Thomas Kuhn’s (1962) *Structure of Scientific Revolutions*, STS scholars such as Bloor (1976) and Barnes (1974) advocated for a commitment to naturalistic and social constructivist explanations of scientific and mathematical knowledge, known as the ‘strong program.’ This led to a significant body of work on the role of interests, biases, and ideologies in the positionality and shaping of scientific knowledge, which has been particularly important for more recent feminist/STS and critical race studies in highlighting the sexualised, heteronormative, and racialised origins of claims that count as scientific knowledge (*inter alia*: Fausto-Sterling, 1985; Martin, 1991; McMillan Cottom, 2016; Biruk, 2018; Benjamin, 2019).

The relationship between science and technology remains an underdeveloped area of interest for criminology, and more broadly, traditional social theory. Science is often posited as the discovery of truth, whereas technology is framed simply as the application of that truth (Johnston, 1984 cited in Pinch and Bijker, 2012). This leads to a process of bifurcation largely between science and nature, what is organic and inorganic, or natural and fabricated (see Brown, 2006). This remains a pronounced feature of criminological knowledge and discourse where technology is described and (under)theorised as a neutral tool to be utilised and harnessed by people in power (Haraway, 1991). In other words, sociality is typically understood as something belonging exclusively to people, thereby constructing ‘social technologies of control’ or ‘technologies of social control’ as social because of human discourse, arrangements, and meaning making. For example, symbolic interactionism (see Chicago School ethnographies section in Chapter 4) does account for relations between people and things but only through the ‘social construction’ of meaning and the semiotic value people attribute to things, as opposed to the material or technical significance of things (Blumer, 1969). In her seminal article on the ‘criminology of hybrids,’ Brown (2006) suggests a technosocial approach that blurs the distinctions between the technological and the social, material and the semiotic, nature and science, and people and things to better understand the nature and character of contemporary crime and punishment. This approach has helped me situate the blurry, messy, and sometimes automated/sometimes discretionary phenomena that are constructed and transmitted throughout the penal surveillance network of EM.

Within the recent history of STS, orientations have begun to diverge, giving way to a rich theoretical and methodological range of technosocial approaches, each with their own set of strengths and limitations. For example, actor-network theory began within the STS tradition but has since expanded into a broader, ‘deeply theoretical methodology’ (Quinlan, 2012: 2) for studying not just the actors responsible for creating and utilising material technologies or techniques, but also the objects of technology themselves in relation to the human actors, as a form of relational materialism (Law, 1992). This ontological distinction of STS is significant because technological systems, along with the people, ideas, techniques, practices, and places entangled with it, are acknowledged as being imbued with social, moral, and political power rather than being dismissed as technologically neutral. There are several significant studies within criminological literature that have either advocated for or also drawn upon this approach to research, either through an appreciation of materiality, an STS-informed framework, or specifically using an actor-network approach (see Carrabine, 2000; Brown, 2006; Armstrong, 2017;

Phillips, 2017; Fraser and Matthews, 2019; Berry, 2019). Building off this body of work, I seek to explore the ways in which both people and digital technologies play a role in the ‘construction,’ ‘framing,’ ‘production,’ or ‘manufacturing’ of realities within the context of digitally mediated punishment (Sismondo, 2008: 14). In order to situate this perspective, as advocated for by scholars in the emerging area of digital criminology (see Powell *et al.*, 2018), I have drawn upon actor-network theory to make sense of what I observed and experienced in the field.

Actor-network theory, as summarised by Law (1992), is centrally interested in operations of power and conceiving of the social as a heterogeneous network of actors that includes non-human things. Objects and things, such as technology, have power and (material) agency independent of human representations of those powers (Bijker *et al.*, 2012). Given the open-endedness of this ontological position, actor-network theory is interpreted differently based on the contexts of the phenomena being studied. The rest of this chapter will situate my theoretical approach by intertwining my interpretation of actor-network theory, primarily the concepts of network, heterogeneity, constraint, and neutrality, with Foucauldian concepts of governmentality, surveillance, subjectivity, and power more broadly. First, I will discuss Foucault’s concept of governmentality and how the actor-network concept helps to situate governance in late modernity, where the divisions between structure and agency are broken down. Next, I will discuss heterogeneity, offering my own interpretation; one that is useful for understanding differently sectorised actors and situating the effects of commercialisation and privatisation associated with contemporary surveillance and punishment and the governing of others. Following this, the next two sections explore mechanisms of power. The first analyses disciplinary power, active subjectivity, and constraint to better understand technologies of the self and the exercise of agency. The last section will explore mechanisms of power around more diffused social control in order to situate my understandings of EM within the context of ‘liquid’ modernity, new prevailing penal ideologies, and the surveillance culture that permeates and connects everyday life.

2. Networked governance

Foucault’s notion of ‘governmentality’ was an ongoing and revisited concept in many of his lectures and much of his written work throughout the 1970-80s (*inter alia* Foucault, 1982, 1987, 1991). It is founded on the notion that to understand the ways in which governmental systems exercise power, and how the practice of exercising

power may transform over time, requires an understanding of the power relations and forms of subjectification inherent in those practices (Foucault, 1982). Governmentality is a significant concept for criminology and for analysing penal systems, particularly because it theoretically differentiates the study of specific institutions from the study of the exercise of power; it separates ‘totalizing’ analyses of government from practices of governance, as well as distinguishing systems or fields of governance such as crime control and criminal justice (Garland, 1997: 174). By analysing practices of governance, specific mentalities, relations, and actions behind exercises of power can be identified. This dissection of the concept of government, into new knowledges of practices, rationalities, and exercises of power, exemplifies Foucault’s broader efforts to deconstruct many of the arbitrary assumptions about basic concepts that are taken for granted and historically passed along (Foucault, [1966] 2008). The conceptualisation of governmentality created new forms of knowledge and ways of studying power.

Bauman’s (2000) ‘liquid modernity’ arguably describes a kind of governmentality that is fragmented, where centralised and monolithic styles of governance have been replaced by more dispersed exercises of power and complex information networks across time and space. Castells (2010) has also written about the ‘network society’ as a way to express similar ways technologically mediated relations have transformed society and order. It is important to consider how such transformations in technology are not just technological advancements, but actively shape cultures, economies, and fundamental aspects of everyday life. The notion of a network is metaphorically and visually salient to understanding how digital systems play a role in the exercise of state power by mapping the topography of contemporary styles of governance (Law, 1999).

The heterogenous network is a core part of actor-network thinking (see Law, 1992). In breaking down what that means, Latour (1996) differentiates technical networks, such as that of trains and electrical grids, from the metaphorical actor-network. Both types of networks are formed as a result of relations and effects that include the circulation and flow of information across both local and far distances. Yet, actor-networks are not fixed or stable like that of an electrical grid. Instead, actor-networks are ‘fibrous, thread-like, wiry, stringy, ropy, *[and]* capillary’ (Latour, 1996: 370). The ways in which things hold together in these kinds of networks and act or affect are through particular assemblages of people and things, which then might disconnect or reassemble elsewhere in a different time/space (Deleuze and Guattari, 1987).

The concept and imagery of a fibrous and thread-like network then begs the question of how power is exercised across such a system, especially a late modern penal system? The character of penal power appears less directly coercive or hard, as we are seemingly 'governed at a distance' (Rose, 1999) and left to increasingly more self-regulation. Within recent penological literature, this is referred to as 'soft power' (see Crewe, 2011), which in some ways seems a weaker form of power yet can be far more intrusive and controlling than direct 'hard' power. The actor-network approach is similarly concerned with the 'careful plaiting of weak ties' and how micro-powers are the result of soft, weaving, thread-like relations and associations of different people and things (Latour, 1996: 370). The way these two lineages of theory link together to better understand the grip of both up-close and at-a-distance governance is significant for this project both conceptually to analyse technologically mediated governance (see Chapter 5) but also practically to make sense of multi-sited fieldwork (see Chapter 4). It helps to situate the connections between different sites, places, people, and things that move throughout the penal surveillance network and constitute mechanisms of power.

The reason for this is that neither Foucault's theoretical work on punishment and power nor actor-network theory are premised on accepting structures and macrosocial systems as fixed or 'out there' entities. Yet, the ways in which these two approaches resolve and reconstitute structure differ on an important point. Within the Foucauldian tradition, structures and established practices are interlocking configurations made up of different elements (Garland, 2001). This view moves away from the dualism between structure and agency and conceives of 'the social' as mediated through and constituted by discursive formations which can be explored through genealogical/archaeological analysis (Lemke, 2014). While technologies of control are the ways in which power is exercised, rationalities of government are the discursive ways of thinking that underpin governance. While this way of thinking about the social world explores how language and discourse is implicated in exercises of power and how these produce material orders in the social world, it renders the non-social (material and technological) only reachable and knowable through the social (discourse) (Lash, 2002; Brown, 2006). The material and non-human parts of these power configurations are only explored in terms of the discourse around them. Underpinning this approach is a hierarchical relationship between the social and the technological, and more broadly, between people and things.

Alternatively, actor-network theory offers a different way of theorising the role of material and non-human 'things' within configurations of governance. The term 'actor-network'

itself is intended to be representative of the agency-structure relationship and in hyphenating them together into a single phrase, flattens the gap between them so as to move fluidly between different levels of analysis (Law, 1999). Ontologically, this way of thinking analytically equalises all actors ranging from an atom, to an individual person, to a government, and beyond. Power and order are ongoing effects of relations and interactions between seemingly ‘equal’ actors which includes humans but also extends out to more-than-human things as well. To provide a more empirical example of what this means, actor-network theory conceives networks as patterns of association between these diverse actors. Actors could be: people, beings, things, artefacts, objects, ideas, policies, and more. In some cases, actors are individuals but in other cases, actors are also networks. For example, the EM service provider in Scotland, known within this thesis as The Company, is an actor within the penal surveillance network but also composed of actors within including Field Officers, system software, Monitoring Officers, hardware, Court Report Writing Officers, and the Monitoring Centre itself. Similarly, the ‘penal state’ is not a homogenous entity, but rather a site of variation and contestation, and a collection of actors responsible for various political, legal, and bureaucratic practices of governance (Garland, 2013; Rubin and Phelps, 2017). This way of thinking about collectives and relations between actors is not exclusive to actor-network theory, but it does provide a way of conceptually exploring structure and agency more fluidly.

However, bringing together the concepts of governmentality and actor-network better articulates the complexities of how penal power operates and the different elements/actors that come together and drift apart. Whereas the concept of a network maps out the topography of relations in a system of power, governmentality conceives of the small interlocking practices that regulate people and the mediation of power through technologies. In developing this theoretical argument, ‘networked governance’ embraces both the discursive social context as well as the possibilities of the material and technological contexts of power relations as well. It is important that when speaking of fluidities and moving between different levels of analysis, we do not erase the asymmetries and power differentials between different actors, such as uneven social structures and the ways that certain techniques of social control impact certain people more than others, especially in penal contexts. This is arguably a weakness of actor-network theory, as it can flatten such distinctions in order to prioritise tracing and describing what one sees amongst ‘equal’ actors which may neglect those on the margins of such relations (Star, 1991; Wajcman, 2000). On the other hand, Foucault’s theorising on governmentality conceives of technologies only as conduits of power which leaves out the ways in which the

technological and material actively play a role in the exercise of power (Foucault, 1982). Combining these two perspectives opens up ways of thinking about exploring soft, or perhaps fibrous, power, more-than-human dimensions, and both equalities and inequalities in relation to the governance of penal surveillance.

3. The governing of others: Outsourced penal surveillance and heterogeneity

Following on from the significance of networked governance and how it can expand our understandings of technologically mediated punishment, this next section will theorise strategies and consequences of privatisation and out-sourcing. I will introduce an interpretation of ‘heterogeneity’ which stems from actor-network theory (see Law, 1992, 1999; Latour, 1996) in order to situate the complexities of privatisation within the context of late modern neoliberalism and more specifically how it helps to better understand the diversity of actors responsible for punishment in late modernity.

It has already been established that the origins of actor-network theory are within the sociology of science and technology, where knowledge is understood as a social product or effect. In this sense, knowledge takes many forms: ideas, truths, materials, objects, institutions, machines, organisations, and even bodies. All of these things are understood as the product or effect of associations in a heterogeneous network of different materials (Munro, 2009). Knowledge and power are embodied in and performed by different material forms. Heterogeneous elements come together to form patterns and assemblages, which in turn, constitute a fluid network. This way of thinking is useful for broadly considering how penal surveillance is organised and enacted as a complex network of different people and things, as opposed to thinking of it as a mere ‘tool’ or just the device on a person’s ankle (see Gainey, 2014). More specifically, heterogeneity is helpful for making sense of the organisation of The Company and reckoning with it as multiple things at once: a global private security corporation, a national contractor, and a collective of locally situated staff members just doing office work. However, before looking specifically at the context of my study, I will first discuss governmentality and ‘reflexive’ government techniques of outsourcing and privatisation (Chan, 2000).

Foucault’s concept of governmentality accounts for practices of power more broadly conceived than just those of the state. While this was for the purpose of looking at practices rather than specific institutions, it also expanded the notion of what constitutes a governmental authority (Garland, 1997). The state was part of the nodal network that

constituted various powers of government, including the family, the church, professions, and experts, amongst many other powers that participate in the 'conduct of conduct' (Garland, 1997; Foucault, 1982: 220-221). This point is significant for late modern understandings of neoliberal governance, which is often characterised by scholars as the diminishing or 'disassembly' of the state (Sassen, 2013). Rather, perhaps it is more helpful to see the apparent outsourcing and privatisation of specific services as a reconfiguration of Foucault's governance network, in order to better suit a transformed late modern society. The rise of 'private' powers, which contractually deliver many of the services (technologies of governing others) formerly provided by public powers of government (see Zedner, 2006), is another way in which the penal state has rapidly transformed in late modernity. However, it is important to acknowledge that private powers require governmental authority in order to exercise specific powers over specific subjects (Garland, 2001, 2013).

Surveillance power, as exercised by governmental and private powers alike in the penal system, creates a competitive marketplace for both technologies and forms of knowledge (Zedner, 2006; Lyon, 2010). For example, the digital supervision of subjects, a form of penal power, is a contractually based service which requires it to be marketed and sold by private organisations and enables a great deal of commercial influence in the governance of criminal justice and crime control (Loader, 2000; Zedner, 2006). The privatisation, and consequential market competition that ensues from surveillance power, resonates with Zuboff's (2015) term 'surveillance capitalism:' the relentless extraction, analysis, and currency of information about subjects (user data) that specific private powers (online services) utilise and profit from, without subjects being seemingly aware of the social and otherwise consequences of such exposure (Nellis, 2018b). It is also important to consider in the late modern penal context the complications that can arise from the number of agencies, both statutory and private powers, involved in the criminal justice process particularly in relation to their specific and varying ideologies and agendas.

Returning to the value of heterogeneity, the divisions between statutory and private sectors or global private organisations and locally situated staff become less important. Governance is heterogenous, entangling both statutory and differently sectorised organisations in the practices and rationalities of governing. Chan (2000) has argued that the outsourcing of services to private contractors is a technique of externalising accountability and an integral part of neoliberal political rationality. This then demonstrates that the provision of criminal justice services such as EM by private sector

organisations is not a retreat of the state, but rather, an exercise of state power and strategic and reflexive reconsolidation of its purpose from service provision to a higher level of regulation (O'Malley, 1996). For the purposes of this study, this notion has further reach and the effects of this are more observable through situated fieldwork experiences and interactions than the purely capitalist appetite for 'relentless extraction' of data (Zuboff, 2015). In fact, one of the most striking examples of finance and profit-based practices by The Company (which will be explored in greater depth in Chapter 5) was the obsession with meeting the requirements for timely responses to alerts/events in order to avoid state financial penalties during audits; statutory and commercial imperatives merged. Nevertheless, both public regulation and commercialisation are relevant to the study of penal surveillance. The operational enactment of digitally mediated punishment was a hybrid, heterogeneous phenomenon, embodying and performing both statutory/regulatory and commercial/private interests.

4. Governing of the self: Disciplinary technology, subjectivity, and constraint

The previous section explored how criminological theorisations of privatisation and the actor-network concept of heterogeneity help to understand the complexities of how outsourced punishment is a rationality of governance (Law, 1992; O'Malley, 1996; Chan, 2000). It demonstrated that penal surveillance is governed by technologies of control, such as national governments, commercial service providers, auditing bodies, and data-driven forms of capitalism. Following on from the previous section, I now move to how penal surveillance is a technology of control in its own right, and specifically how it is a technology of the self that enrolls people in their own subjectification (Foucault, 1982, 1987; Garland, 1997). To begin, I will outline how actor-network theory can be brought into dialogue with Foucault's work on technologies of control using the disciplinary 'Panopticon' as an example (Foucault, 1977). This section then turns to a broader discussion about the concept and process of subjectivity which involves the active construction of the subject-self as opposed to subjugation as passive domination (Foucault, 1987). In order to expand upon that latter point, I will introduce the concept of 'generous constraint' (see Gomart and Hennion, 1999; Gomart, 2002) which stems from actor-network theory as a way of moving the construction of subjectivity beyond the dualisms of active/passive, care/control, and freedom/oppression.

As part of the genealogical analysis that broadly defines the work of Foucault, it is evident

his understanding of the concept of technology was complex, and included not just artefacts as technology, but also the notion that technology could be a technique, or an idea. Similarly, within STS, it is most commonly defined as being constituted as: an object, activity, knowledge, or mode of organisation (MacKenzie and Wajcman, 1985: 3). This aligns with how Foucault (1977) has theorised technologies of disciplinary power. The subject is placed in the 'Panopticon,' a technology of design; the subject is then managed through routine and drills, a technology of normalisation and synchronisation; as well as various techniques of surveillance and examination. Through these technologies, power is exercised over people through practices that have particular rationalities and that arguably tie individuals to social collectives in particular ways. One of the most prominent actor-network theorists, Bruno Latour (1986), has drawn upon Foucault's work on technique, in particular, in order to understand the ways in which power manifests and is exercised locally. It is important, however, to acknowledge where Foucauldian theorising and actor-network theory differ in thought. Whereas Foucault was interested in how techniques of governance subjectify and socialise *individuals*, actor-network theory is premised on understanding the ways in which techniques socialise *things* (Latour, 1999).

Despite these differences, it is apparent that Foucault's work influenced the development of both actor-network theory and STS. Similar to Foucault's (1982) understanding of power, actor-network theory conceives of power as the ability to affect the actions of others throughout networks, in particular through power being exercised over a human subject by a non-human object, or vice versa (Latour, 1986: 265). Although Foucault does not recognise the socialising abilities of technology, it is apparent that Foucault understood power as networked, or as 'something at circulates' (Foucault, 1980: 98). Perhaps most importantly however, at the crossover between what can be understood as Foucault's sociology of punishment and Latour's sociology of technology, there is the shared understanding of technology being imbued with social and moral dimensions. Rather than viewing technology as simply a tool, Foucault (1977) conceptualised of technology as a political actor and morality as a political technique.

Prison is thus seen as a 'technological apparatus' which could be adapted and utilised for a variety of governmental and institutional rationalities of control. The term 'discipline' represents the ways in which governmental institutions exercise a specific form of power to control and surveil subjects through architectural design of a specific, enclosed institution (Foucault, 1977). Disciplinary power is a form of soft power, in that it controls people by training the body and mind to behave a certain way when it is being

watched, rather than through direct force or coercion (Garland, 2001; McNeill, 2018a). The architectural design of Bentham's famous 'Panopticon' is one of these technologies, as a design based on the principles of constant visibility and individualisation, which creates 'docile subjects' who are trained to behave a particular way under the gaze of the supervisor (Foucault, 1977). In late modernity, while certain traditional disciplinary institutions still remain – though to what extent or capability they exercise the same powers is a separate issue – penal technologies of governance and technological apparatuses have diversified beyond the notion of an enclosed panoptic tower (see Cohen, 1985; Garland, 1985).

As a result of these transformations in governmental practices, individuals are left responsible for a great deal of active self-regulation in late modernity. In later work, Foucault (1982) clarified that subjectivity involves active participation and choice by individuals who are willing and involved in the process of their own governance. It was still a form of governmental power, but rather than it being coercively forced upon subjects, more subtle techniques were practiced of aligning the rationalities and actions of individuals with the various agendas of governmental authorities (Garland, 1997). Rather than subjectivity being a form of deterministic domination, active subjectivity is conceived of as a process in which people construct themselves as subjects shaped by the social and moral dimensions embedded in technologies of control, architectures, and institutions (Foucault, 1982; Garland, 1997). Whereas in modern times Foucault saw this as a form of 'self-care,' it has intensified in late modernity as a form of necessary self-governance and self-responsibilisation in many systems and networks of governmental power including the penal system (Foucault, 1987). These are technologies of the self. In a study of the English and Welsh prison system, it was observed that people in prison were left responsible for self-regulating their behaviour and conduct, for making improvements towards their behaviour and habits, for seeking any positive engagement with the prison, and for accepting the consequences of failing to properly self-govern as such (Crewe, 2009, 2011). In this sense, these people were left to construct themselves as subjects that fit into the institution's frames of representation and category systems (Foucault, [1966] 2008). Although this example demonstrates the experience of those subject to the penal power to incarcerate, those subject to other penal powers such the powers to supervise, monitor, levy fines, or reform are also expected to practice increasingly high levels of self-governance and responsabilisation (Garland, 2013).

In the vein of Foucault's (1982) notion of active subjectivity, the existing empirical

literature on being subject to penal surveillance demonstrates that it is more complex than simply being a mechanism of docility and inaction, nor is it a universally liberating experience (see Staples and Decker, 2010; Berry, 2019). These dualisms of care/control, autonomy/oppression, and active/passive subjectivity which pervade debates about the intentions of EM governance do not fully capture the range of ways people construct and perform their own subjectivity. In Berry's (2019: 5 – 7) work on experiences of being under penal surveillance, his analysis demonstrated how people adapted their restricted autonomy to fit their own needs. The constrain of adhering to a curfew and restrictions associated with EM had actually 'freed' certain participants from addictions, habits, or relationships they wished to break (*ibid.*). In this case, the coercion/freedom relationship becomes blurrier as supposedly coercive technologies are experienced as 'benevolent' and at the same time, supposedly liberating rationalities of governance are enacted through techniques of coercion (Berry, 2019: 5 – 7). This also resonates with Shammass' (2014) work on the relative pains of freedom, and highlights that perhaps wider criminological research should not rely on assumptions of what freedom means and to whom.

Berry's (2019) work also draws upon the 'sociology of attachment' (see Gomart and Hennion, 1999; Gomart, 2002) which stems from theory associated with actor-network theory and important to elaborate for its relevance to my own research. Linked to the dualism of active/passive subjectivity, this theoretical approach seeks to explore the affective and emotive aspects of subjecting oneself to a kind of power. Rather than framing power as only a form of oppression, this body of work explores how it can be reframed as the process of being swept away by or under the influence of something such as music, drugs, or love (Gomart and Hennion, 1999). This line of theorisation conceives that there are techniques, spaces, materials, devices, and contexts that offer the resources for people to relinquish control or submit to constraints, for better or worse, as technologies of the self (*ibid.*).

This direction of theorising how people live alongside the penal technologies in their everyday lives opens up potential avenues for exploring penal subjectivity outside of the frames of reference largely covered in the previous chapter. Gomart (2002) argues that 'constraint' generously expresses the ways that power can both oppress and 'give a chance' (Latour, 2000: 372). This way of thinking about subjectivity is not to search for redeeming qualities about technologies of control, but to think more critically about different kinds of power and the ways subjectivity is enacted. These different perspectives on subjectivity are important for highlighting and exploring the complex effects of penal

powers and how people can exercise agency, and possibly even resistance, when subject to EM or other penal regimes. Pushing this line of theorisation even further, it is also worthwhile to consider the actors responsible for constituting and enacting forms of control as well, as active subjects in its continuation and legitimation, as well as individuals who are as much entangled in the culture of surveillance as those being monitored (Lyon, 2018).

5. The optics of post-disciplinary power and connectedness

Whereas the previous section theorised subjectivity in the context of technologies of the self, this final section considers post-disciplinary power and transformations in liquid modernity (Lyon, 2010). Penal surveillance should not be theorised as either wholly disciplinary nor post-disciplinary, liberating nor carceral, focussed on individuals nor masses, and of course, neither purely social nor technological. People under criminal justice control are increasingly responsible for their own wellbeing and maintenance in the justice system. Yet, at the same time, they are observed, assessed, and managed through hybrid processes of actuarial calculation and professional judgement, most prominently in the form of a risk classification (Hannah-Moffat, 2005, 2013). Feeley and Simon (1994) refer to actuarial justice as a technology of power that groups categories of people based on risk and the probability of future offending. One of the fundamental characteristics of actuarial justice is its reliance on the concept and metric of risk, where people are 'socially sorted' and treated differently according to an imposed category and calculation (Lyon, 2003). The unit of analysis in this justice model is not the corporeal individual, but rather, one's risk profile or 'data double' (Haggerty and Ericson, 2001) which functions as a measurable and digitised version of the person. Not only is it worthwhile to consider the multiplicities of personhood produced by these systems of observation and calculation, but also how it contradicts the self-governing autonomy given to people under criminal justice control discussed previously. Crewe (2011: 456) refers to this discrepancy as a 'pseudo-autonomous space' in which individuals are trained to exercise self-regulation and governance, but also undermined by dominating exercises of power.

Deleuze (1992) argues that as a broader transformation, the disciplinary society has become the 'society of control.' Whereas disciplinary power is organised around enclosed environments, such as the school and the prison, social control is a more 'free-floating' form of governance, in which technologies are more diffuse and seemingly falsely liberating (*ibid.*). Although Deleuze's analysis offers a framework for conceptualising new

forms of power and rationalities of governance, it is less helpful in understanding why and how the technological apparatuses and rationalities of disciplinary power are still in use. Despite this limitation, the society of control offers significant insight into the transformations of penal technologies and mentalities in late modernity. Deleuze (1992: 4) argues that controls are malleable, like a ‘self-deforming cast that will continuously change from one moment to the other,’ which perhaps offers explanation for the diversity of community sentences (technologies of governance) available outside the disciplinary apparatus of prison (see Robinson and McNeill, 2016). Technologies in the society of control are reconceptualised as ‘mechanisms’ or ‘machines’ which substitute disciplinary apparatuses. For example, EM is explicitly mentioned as such a mechanism, or penalty of substitution, for social control that supposedly replaces prison. Despite the fact that both prisons and EM (along with an even wider array of other penal sentences) coexist and in fact have a far more symbiotic relationship than Deleuze (1992) theorised, the society of control is useful for conceiving of contemporary penal change and more dispersed styles of governance.

Certain rationalities for the exercising of disciplinary power have also transformed in late modernity, such as the principle of individualisation. As individuals are subjected to new forms of power such as surveillance power, which flows like ‘creeping weeds’ (Bauman and Lyon, 2013: 3) through late modern society, there is less of a need to individualise. According to Deleuze (1992), the society of control is less concerned with the separation of the individual from the mass; individuals become categorised ‘dividuals,’ and the mass information collected from all ‘dividuals’ feeds into a collective bank of data. Within criminological and penological theory, these techniques of categorisation and dividualisation have been explored as a form of degradation, as the optics of penal power amass and misrecognise people (McNeill, 2018a). This is a way that technologies of governance selectively categorise certain subjugated social groups as untrustworthy and unworthy of recognition (McNeill, 2018a; Miller and Stuart, 2017). Whereas McNeill (2018a, 2018b) had more specifically referred to human mediated penal supervision, similar insight from Nellis (2009: 59) has been shed on the optics and transformation of the individual regarding digitally mediated penal supervision:

‘EM-technology does *individuate* -- pick up the digital trace of a single body as it arrives home -- it does not (cannot) individualize, in the sense of generating knowledge of a person’s distinct and idiosyncratic characteristics, as a probation officer might once have done. The mark on the screen in the monitoring centre which indicates that the tagged body is present in a house is

a depersonalized entity, an atomized signifier -- and that is all that is needed for an authority to judge whether or not compliance has occurred.'

This excerpt captures the contradictory process of penal surveillance that singles out individual signals and bodies, but in such an automated, depersonalised, and repetitive way that cannot be adequately described as individualising. Here again, this highlights the important relationship between seeing (technical) and knowing (social), which both contribute to the metaphorical optics of punishment, but can mean different things.

Feely and Simon (1992: 463) argue that penal practices have transformed in a way that lines up with Deleuze's (1992) control society, where the focus is on 'managing a permanently dangerous population while maintaining the system at a minimum cost.' This specific enactment of punishment and justice is underpinned by a heavy reliance on digital technologies both for managing people, as well as keeping costs down. The growth in digital penal technologies is indicative of the way society has embraced 'techno-managerial' strategies towards criminal justice (Paterson, 2013: 220). This is important because digital surveillance carries connotations and assumptions about immediacy and accuracy (Marx, 2016). Whereas punishment was once a spectacle, corporeal, and subjective, penal surveillance is heralded as efficient and clear-cut. I argue EM is mythologised as such because of the neutrality, progressiveness, and ubiquity associated with digital systems and technology (see Gitelman, 2013; Seaver, 2017; Biruk, 2018; Ugwudike, 2020).

EM is as much about being seen (or mis-seen) as it is about the enactment and rationalities of seeing. Earlier in this chapter I drew upon Lyon's (2010) concept of 'liquid surveillance' to help situate my theorising on governance. This is because liquid surveillance is less of a way of specifying surveillance and more of an orientation (Bauman and Lyon, 2013); it situates surveillance developments in the fluid and changing developments of the present. Without a fixed container, and driven by consumer and techno-security demands, surveillance 'spills out all over' (Bauman and Lyon, 2013: 2-3).

In order to move between theories on discipline and social control, it is important to unpack the unique power of penal surveillance. Despite the association of digital penal supervision with the larger narrative of global digital transformations, the pervasive image and language of the prison continues to dominate the conceptualisation of EM, as discussed in the previous chapter. Terms such as 'virtual prison' (Roberts, 2004) and 'e-carceration' (Kilgore, 2015), which pose it as another form of carceral space, are making

an important argument but nevertheless contain EM within understandings and comparisons of prison. Though intensive forms of monitoring can involve punitive confinement and exclusion, Nellis (2018b) argues that the location, mobility, and pinpoint tracking of an individual in communal open space cannot be fairly described as 'carceral.' In moving beyond the connotation of the institution, Nellis' (2018b) term 'coercive connectivity' better encapsulates the more fluid and controlling ways in which EM is both enacted and experienced. This concept is significant for understanding the character of late modern penal technologies, specifically those which govern through digital, virtual infrastructure. It presupposes that not only is power exercised through a technological regime over a subpopulation of people, but that an otherwise public digital infrastructure has been modified for a penal context. This 'translation' of the technology and its infrastructural network requires an understanding of technological artefacts and systems as social (Callon, 1980). This reveals a limitation in traditional understandings of criminological and sociological enquiry, where only human subjects are recognised as social. In Chapter 6, I return to the concept of 'coercive connectivity' and reframe it through the empirical findings of this study (Nellis, 2018b).

Returning to the early work by STS scholars, one key concept underpinning the 'strong program' was that the construction of scientific knowledge was asymmetrical; truth and facts were accepted disinterestedly whereas only mistakes and irrationality were subject to more of a social constructivist analysis. The idea that 'there can be no sociology of scientific knowledge but only a sociology of error' motivated STS scholars to make scientific knowledge more symmetrical (Sismondo, 2008: 14). There are many ways in which research and theory can balance out asymmetry. One of the major principles of actor-network theory is that symmetry is understood as the wide distribution of agency. Human actors and non-human objects/things are equally integrated into the construction of technosocial networks (Callon, 1987; Latour, 1996). Ontologically, this is significant for understanding the nature of the technosocial world. In recognising the agency and sociality of non-human 'things,' we can move beyond (under)theorising technology as neutral tools and instead better understand and explore the range of relations between different people and things across a complex network.

By adopting the actor-network principle of symmetry, I hope to better explore the entanglement of relations between people and machines which I have already argued in Chapter 2 is a gap in the broader body of research on EM. The technosocial dimensions of how penal surveillance is enacted, spread out, and experienced are an important and

missing aspect to the growing body of knowledge on the subject. I argue it is important to consider the ways in which technology can affect and mediate behaviours especially in penal contexts.

It was mentioned earlier that digital technologies create multiplicities of personhood, but this can also extend out to understanding multiplicities of presence as well. ‘Ontological multiplicity,’ as coined by Mol (2002), is founded on recognising that objects, actors, and things render the world differently and that realities are not just performed and enacted, but also overlapping at times. This is significant for theorising the ways in which digital systems render realities. The immediacy of possible contact between people has established new norms of connection and what it means to ‘have control of one’s – or another’s – life’ (Nellis, 2018b: 5). The hybridity of digital and corporeal contact between those subject to penal surveillance and those who enact it break down the binaries between time/space, active/passive subjectivity, or being present/absent. However, surveillance is no longer rare, exotic, or necessarily punitive. People become so accustomed to the everyday occurrence of surveillance, that some argue it mimics or is no different than EM (Harcourt, 2015). However, it is important to not overgeneralise this point. Many people don’t wear wearable technologies in the name of wellness, self-improvement, safeguarding, or autonomy. For example, there is a growing body of qualitative medical research around ‘wandering’ or ‘wayfaring’ as a sociomaterial practice for people with cognitive impairments, which GPS tracking technologies transform from a ‘risky’ practice into a seemingly safe and liberating one (see Graham, 2015; Wherton *et al.*, 2018). These wearable trackers function like, and in some cases are exactly the same devices as those on justice-involved people (see Elthis, 2005). Notwithstanding the many ethical debates about this, even at its foundation it demonstrates that the same device can produce opposite experiences: granting of freedom or restricting of freedom. The experience of wearable devices is socially situated. This point reconfirms Nellis’ (2018b) conceptualisation of ‘coercive connectivity,’ in that the unique dimension of penal EM is not just the intrusiveness or the restriction, but the coerced experience of being contractually obligated to intense digital regulation for a duration of time.

Conclusion

The aim of this research is to untangle the networked governance of penal surveillance in order to better understand how we use digital technologies to punish people. The phrase ‘network governance’ alone reveals much about how I have conceptually situated the

topography of power relations amongst the people, devices, technologies, spaces, and places involved in the practices and experiences of EM. Spread out across time and space, penal surveillance forges new connections between different actors and sites. Entangled in these technologies of control are not just state governments, but also a number of private powers and vested interests that bring attention to both the profitability of commercialised punishment and the ways in which this can exploit those subjected to these technologies. This chapter has explored not just how penal surveillance is governed by technologies of control such as out-sourcing and privatisation, but also how it is a technology in its own right that enrolls people in their own subjectification. Analysing this process, however, needs to involve consideration of how people perform their own subjectivity and a more open-minded approach to understanding different kinds of freedom. In moving forward towards a retheorising of digitally mediated punishment, there are distinct transformations in how digital systems shape our understandings of the world that need to be integrated into our theoretical and conceptual framings of the social world. These digital infrastructures foster intense connectivity between people and mediate our very perceptions of reality.

When penal surveillance is unweaved and untangled, a seemingly endless and complex network is revealed. This chapter situated how EM can be conceptually reframed as a socially and technologically embedded system of penal surveillance. In order to achieve this, I brought two theoretical approaches into dialogue with one another, namely Foucault's social theories on governmentality and surveillance (*inter alia* 1977, 1982, 1987, 1991) and concepts from actor-network theory and Science and Technology Studies (*inter alia* Latour, 1992; Law, 1999; Mol, 2002; Gomart, 2002). Combining these two perspectives takes this study beyond the settled narrative of EM I outlined in the previous chapter and opens up different ways of exploring the blurred boundaries between the social and the digital. I argue that EM is both enacted and experienced as a technosocial phenomenon, which requires a nuanced understanding of the people, things, spaces, devices, and ideas that connect to one another (Brown, 2006). This requires a more radical ontological and epistemological shift from what is traditionally adopted within studies related to the sociology of punishment and why conceptual approaches from the sociology of science and technology can expand how we frame this phenomenon. This chapter set out how I have retheorised penal surveillance in order to situate it in the rapidly changing transformations of late modernity and a society defined by surveillance infrastructures and digital devices. While the theoretical and conceptual work for this has now been established, the following chapter will shed light on how I enacted this in the field

methodologically.

Chapter Four: Methods, reflections, and being the familiar stranger

Introduction

Thus far, this thesis has introduced a critical analysis of the existing literature on EM and ways of theorising power, technology, and penal subjectivity more broadly. In order to move beyond research that attempts to quantify, typologise, or objectify EM as a tool, I argued for more research into the experiential and messy relations involved in monitoring practices. This requires a fundamental reframing of what ‘the social’ means as it is typically understood in criminological enquiry as an exclusively human enterprise. There is also a need for critical and engaged research grounded in the experiences of the many people, places, and ‘things’ that become entangled in EM.

This chapter will detail the design adopted for and fieldwork conducted in this study, as well as outlining the analysis process. This includes the ideas and ways I have been ‘thinking through’ concepts, how I put these into practice, and reflexive considerations for studying EM (Jackson and Mazzei, 2012). The broad aim of this study was to untangle the networked governance of penal surveillance through a deeper understanding of what it is like to both be monitored and do monitoring. *What are the relations between people and surveillance technology? How do differently situated actors experience the impact of EM? Does EM change penal supervision in the community, and if so, how?* In order to meet this aim and answer these research questions, I conducted an ethnography of penal EM in Scotland between October 2018 – November 2019 using a range of methods including participant observation (approximately 70 hours) and unstructured interviews with people subject to EM (10 participants).² Ethics was constantly renegotiated throughout the course of fieldwork and afterwards, therefore, instead of being a bracketed section of this chapter it instead features as a diffuse discussion throughout.

This chapter begins with an introduction to the methodology I developed which draws both on ethnographies more familiar to criminological enquiry but ways of thinking from broader subject areas concerned with the social-material and social-digital relationship. The next section will detail those methods, how they developed throughout the course of fieldwork, strategies I used for access and recruitment, and reflections on the fieldwork

² This study was funded by the College of Social Science at the University of Glasgow and received ethical approval by the University of Glasgow’s College of Social Science Ethics Committee prior to entering the field (see Appendix A for approval letter).

experience. A similar discussion will follow on how the data was analysed throughout the fieldwork process and written about as research findings in Chapters 5 – 7.

1. Methodology

This section will outline the ethnographic approach adopted in my research, including a critical analysis of my overall ‘perspective’ on the nature and ways of knowing social reality (Silverman, 2006: 3). Like most ethnographic research, the process of conducting this fieldwork was based more on opportunistic methods and access than a neatly arranged set of sites and schedules. However, it is important to be reflexively aware of both the messiness of my approach and of the principles and practices that guide my positionality and consequentially inform how I construct the realities I observe (Law, 2004). I intend to draw out significant contributions to the craft of ethnography that have informed the orientation of this study including interpretive, criminological ethnography and STS/actor-network theory. I hope to explore and critically engage with the ontological and epistemological assumptions that reinforce each of these and how they informed my own project. Therefore, this section includes an overview of ethnography as a methodology, a critical discussion of criminological ethnographic tradition, and an outline of actor-network theory and its ontological and epistemological underpinnings. In conducting a criminological ethnographic study of the entanglements, relations, and situated experiences of penal electronic monitoring in Scotland, I found it necessary to look beyond traditional criminological and ethnographic knowledge on confinement and punishment, in order to adapt to the field sites and fluxes proffered by surveillant technologies and the multiplicities produced by these ‘technosocial’ systems (Brown, 2006).

1.1 Overview of ethnography

Ethnography is a form of inquiry and methodological approach to research that broadly emphasises ‘close-up, on-the-ground observation of people and institutions in real time and space, in which the investigator embeds herself near (or within) the phenomenon so as to detect how and why agents on the scene act, think and feel the way they do’ (Wacquant, 2003: 5). I used this broadly qualitative approach to ‘uncover’ and ‘discover’ (Fassin, 2017: 5) findings that would otherwise not be revealed or generated by other qualitative or quantitative methodological approaches. Although most ethnographers use participant observation, a method of data collection that I will discuss further in the section below on methods, there is no single approach to collecting data ethnographically. Rather than

thinking of ethnography as a method, Ferrell (2009: 16) argues it is more useful to think of it as a ‘sensitivity’ towards the social world.

Ethnographic fieldwork is laborious. Traditionally, it involves long-duration immersion (often co-residency) in the community under study in order to forge an ‘enduring human connection’ with those around you (Burawoy, 2009: 268-269), which distinguishes it from other qualitative methods. There are ways of conducting ethnography that are based more on ‘low-flying,’ ‘live,’ or mobile methods than the traditional single-site, dwelling type, but these approaches do not make the demands on the ethnographer any lighter (Peck and Theodore, 2012; Fraser, 2018). I worked eight-hour long nightshifts with Field Officers; touched all four corners of a person’s house with them while they were being set up with a tag; grabbed breakfast with interviewees at their local café; travelled to different cities at 6am only to be stood up; and played peek-a-boo with young kids while their dad was being investigated for a ‘denied absence.’ I came home smelling like cigarettes, pets, or firewood; endured the piercing alarm of EM units during installations; heard the worries and concerns of loved ones and family members on the phone to office staff; and, listened to the stories kindly shared by those I interviewed. The labour required to do ethnography is physical, but also emotional. As Ferrell (2018: 152) states:

‘We have to learn with our eyes and ears, sure, but also with our hearts and our guts. After all, it doesn’t do much good to record the physical details of a police chase or a night in the slammer or an illicit train ride if we don’t know what such events feel like to those involved in them—if, that is, we get the emotional register wrong’.

My methodological approach was founded upon the idea of building very human connections with people that are involved in a peculiar network of digital connectivity, in order to better understand how they act, think, and feel about penal electronic monitoring. These connections are not exclusively limited to those subject to electronic monitoring, nor to those who enact and enforce it, but a combination of both. In order to study power, it is as important to ‘study up’ as it is to ‘study down’ (Nader, 1972).

1.2 Chicago School ethnography

Criminological ethnographies are heavily informed by the Chicago School of sociology (*inter alia* Hughes, 1931; Cressey, 1932; Whyte, 1943), a movement that began in the 1920s and 30s that produced a paradigmatic body of work on urban ethnography. Whereas classic anthropological ethnographies involved relocating to the faraway natural habitats of

‘natives’ under study, Chicago School ethnographers looked to study their own cities and neighbourhoods in order to better understand so-called ‘deviancy’ and the neglected ‘underclass’ of the city’s urban ecology (Brewer, 2000). Robert Park ([1925] 1967) of the Chicago School advocated for intense fieldwork and first-hand observations of studying social phenomena in their natural settings and in ‘real time’ (Bulmer, 1984: 105). Their approach was linked to the idea of ‘verstehen’ (Weber, [1917] 1949) which is still an influential concept in criminological observational studies (Ferrell, 1997). The concept of verstehen and its use by the Chicago School ethnographers lends significance to the participatory nature of my ethnographic fieldwork with The Company and the activities I took part in during ride-alongs and in the National Monitoring Centre. The concept is supportive of an interpretivist approach to ethnography, which has informed the broader epistemology of this study as an insight into people’s everyday experiences of both being monitored and doing monitoring. However, the nuances of my epistemological position will be further discussed below.

Symbolic interactionism also emerged from the Chicago School, originally based on the works of Mead (1934) but brought to more prominence by one of his students, Blumer (1969). According to Blumer (1969), the social organisation of society is determined by the interactions between social actors and the symbolic meanings those actors apply to social phenomena. Symbolic interactionism emphasises a micro-level approach to understanding meaning, interaction, perspective, and the self. The emphasis is placed on the meanings people attribute to the social world around them. However, while this perspective takes into account the interactions between social and material elements, it exclusively focuses on the social effects of this, as opposed to also considering the material, technological, or any other ‘more than human’ effect which could reveal different dimensions of interaction and coming together. This has long been a critique of traditional criminological and sociological research; that is, that there is within them an implicit and unchallenged hierarchy between people and things (Latour, 2005; Brown, 2006). The first-hand, in-depth observations stemming from the symbolic interactionist approach are vital to my own methodological approach which looks at social (and digital) interactions in many interrelated contexts. Yet, the exclusive focus on and/or limited conceptualisation of ‘the social’ presents a number of epistemological and ontological limitations for studying technologically mediated punishment and ‘more than human’ relations.

1.3 Actor-networks and multiplicity

Beyond the social influences of my methodological approach, I seek to explore the ways in which both people and digital technologies play a role in the ‘construction,’ ‘framing,’ ‘production,’ or ‘manufacturing’ of realities (Sismondo, 2008: 14). In the previous chapter, I demonstrated how EM can be reframed as a network in order to better understand the different relations that enact its governance. My theoretical and methodological approach to this study has been significantly informed by concepts and sensibilities from the body of works associated with actor-network theory (see Law, 2004; Latour, 2005). While some interpretations diverge, actor-network theory is argued to be a ‘deeply theoretical methodology’ (Quinlan, 2012: 2) and in particular, the works of John Law, Annemarie Mol, and Vicky Singleton have taken it in a more methodological and non-prescriptive direction which offer broad sensibilities for thinking through and acting on/in the world (see Mol, 1999, 2002; Law, 2004; Singleton and Law, 2013).

The concept of ‘symmetry’ is both ontologically and epistemologically significant for this research (Callon, 1986). However, here I wish to emphasise the epistemic relevance of it and how it informs ethnography. Symmetry aligns with the broader socio-material position that the dichotomies between nature/science, material/immaterial, or human/thing are artificial (Law and Hassard, 1999; Latour, 2005; Brown, 2006). It follows that practices, organisations, networks, and actors are heterogenous and an ‘assemblage’ of people and things that come together (Deleuze and Guattari, 1987). Theoretically, these assemblages continuously come together and drift apart in a web of action. Methodologically, this means being present to observe how different people and things interact and relate to one another. Thinking about the enactment of monitoring in this way helps to understand how it happens in different places with different actors, such as the Monitoring Officer who makes a phone call from the National Monitoring Centre but also the Field Officer who knocks on someone’s door. Of course, symmetry also implies the wide distribution of agency. Earlier I mentioned that the epistemology of this study is broadly interpretivist and this still holds true. Rather than confining that to people though, I considered how digital technologies also interpret phenomena, such as how the tag makes meaning and transmits presence-detecting information back to the Monitoring Centre. In this way, humans and things are both integrated into the construction of technosocial networks (Callon, 1986).

There is meaningful criticism from other areas of STS, particularly feminist scholarship, that symmetry reduces the complexity of the human experience and the significance of

power inequalities and oppression (see Casper and Clarke, 1998; Wacjman, 2000; Quinlan, 2012). It is important to reflect on what it means to recognise non-human agency, particularly for something such as an assemblage of penal surveillant technologies and people. I argue it is important to consider the ways in which technology ‘acts’ and how it can impact human behaviour. In my own fieldwork, this was part of the uncovering and discovering process, and rather than reducing human experience I found that it helped to enrich it by paying attention to how people spoke about and related to the technologies in their lives; how it made things easier or harder; how a computer interface or mobile phone or tag changed how someone thought; and how technologies were involved in the enactments of realities. I argue this criticism of symmetry depends on how researchers interpret what it means and how they enact it in the field.

Linked to this issue is the criticism that actor-network thinking is overly focussed on ‘male heroes, big projects and important organisations’ (Wajcman, 2000: 453). This ‘executive approach,’ which gives preference to more up-stream actors (such as those working in a laboratory), is often missing the perspective of other actors in end-user and operational positions (Star, 1991: 29). This raises questions about which actors are listened to within actor-networks and which are routinely silenced. This links back to the point I made in Chapter 2 about studying differently situated actors as opposed to singular perspectives in isolation. To better capture the diversity of power relations within a technosocial network, feminist STS scholarship has contributed towards a range of typologies to better represent those affected downstream by technological innovation or made invisible by those in power (see Oudshoorn & Pinch, 2008; Casper & Clarke, 1998; Saetnan *et al.*, 2000). For example, Star (1991) highlights that marginality can lead to some actors having membership as both an insider and outsider to the network; that the network is ‘stabilised’ for some and not others. For example, this helped to understand how a person being electronically monitored was both ‘inside’ because their body is digitally connected to an ICT system infrastructure by The Company, yet they are simultaneously ‘outside’ because they are excluded from many of the practices and knowledges within The Company. Again, this criticism reflects a particular interpretation and enactment of actor-network theory whereas this research includes the perspectives of monitored people as a fundamental actor for understanding the experience of EM. These criticisms have significantly informed the fieldwork I carried out and made me reflect on how I enacted this ethnography.

Methodologically, it is also important to discuss how framing the field as a network informs how I move through different trans-local sites and make sense of the physical and metaphorical distances between the actors, activities, and places my fieldwork took me. Multi-sited fieldwork is defined as 'ethnographic research self-consciously embedded in a world system... to examine the circulation of cultural meanings, objects, and identities in diffuse time-space' (Marcus, 1995: 96). Unlike traditional ethnographic research, multi-sited ethnographies are not confined to a single field site, nor a single lifeworld or system (*ibid.*). Moving between sites such as the Monitoring Centre, on the road, interview locations, online platforms, and people's houses was an intriguing but complicated aspect to this project. Not only was it difficult to arrange in the most practical sense, but it was also difficult for me to come to terms with how these sites were related to one another and how I positioned myself across all of them. The technique of 'following' or tracing an object, idea, or story was used to situate and materialise the contingent relationships between field sites (Marcus, 1995). Within the context of my own fieldwork, I focussed on tracing the surveillance data that was generated and shared amongst many actors involved in EM.

Each site or node of the network was linked together into a complex, contingent field site through my mobility and embodied experience. Although formal access to The Company was technically my entrance to the field, each visit to a monitored person's home during a visit felt like entering the field all over again because of the constant movement to new places and meeting of new people, renegotiating myself and getting to grips with the context and dynamics of that particular site and the actors within it. Reflecting on this aspect of fieldwork, it was challenging to be pulled in so many directions and consider what it meant to 'be there' as well as 'be somewhere else' (Peck & Theodore, 2012: 25). A multi-sited approach inherently requires a conscious recognition of my presence in the field and how the field transforms across different sites, as does my identity (Marcus, 1995). My mobility was not just a fieldwork quirk, but a productive part of site-making and visibility-work.

To conclude this section of the chapter, there is a strong relationship between the way I think through theory and carried out fieldwork. My methodology has outlined the ways I have situated my approach to understanding the nature of social reality and to know more about it. My approach to ethnographic research for this project was informed by Chicago School criminological ethnographies and actor-network theory sensibilities towards researching phenomena that expand beyond limited interpretations of the social. The rest

of this chapter will cover more about the fieldwork I carried out and how I analysed this data. However, this section highlights much of the thinking and ways in which I focussed on micro-level, everyday details, mess, and the ways technology affects. These will continue to be reflected on as I outline my data collection methods.

2. Participant observation

Participant observation is the most common research method used in ethnographic research (O'Reilly, 2005). It involves 'the study of people in their own time and space, in their own everyday lives' (Burawoy *et al.*, 1991: 2). Some scholars refer to it as a natural sociology because it involves studying subjects in their 'natural habitat', *in situ*, as opposed to the less natural setting of an interview (Blumer, 1969; Schatzman and Strauss, 1973). There is always a degree of interaction and participation between the participants, observer, and situated context of the field, but the level of active participation an ethnographer exercises can range. In my practice of it, I adopted a more situational style where I shifted from being relatively unobtrusive to actively participating depending on the context. Reflecting on my style of participant observation, my confidence as an ethnographer and growing comfort in the field also impacted how I performed my role. Participant observation is a dynamic and active method requiring a great deal of work: participating, observing, making notes, asking questions, and collecting data (O'Reilly, 2005: 101). While some enactments of this method are more prescriptive (see Delamont, 2007), I instead locate my approach more in line with O'Reilly's (2005) more open interpretation of participant observation and ethnography more generally and Fraser's (2018) visions for 'future ethnography' and how to situate it amongst rapid contemporary social and technological change.

I used this method to explore what it was like to do, or enact, monitoring as a practice. This involved spending time with EM Officers who worked for The Company in order to understand the experience of doing EM. The all-encompassing role of this one company in Scotland made it simultaneously simpler for me to seek gatekeeper access while also putting pressure on me to make a positive and professional first impression, to avoid being barred from the entirety of the field. I knew from other researchers in the subject area that The Company has been open to research in the recent past (see Graham and McIvor, 2017; Gacek, 2018), yet I waited several months before contacting them in order to do some background research. I started communicating with The Company's Service Director in March 2018 and soon after agreed to meet in person to discuss my research and what

access may involve. That meeting took place in April 2018 at the National Monitoring Centre, although the Service Director was in another meeting at the time so I met with the Research and Development (R&D) Officer, who became my gatekeeper throughout fieldwork with The Company. Before meeting in person, both the Service Director and the R&D Officer communicated through email that they were eager to hear about my project ideas and were open to helping me carry out my research. The actual meeting lasted several hours, with the Service Director popping in for only about 10 minutes. I have not spoken with the Service Director since then, even when they were around the office during the next 13 months of fieldwork.

Ito *et al.*'s (2010) edited book on how young people live and learn with new medias is titled *Hanging Out, Messing Around, and Geeking Out*. Although this book is about a different group of people and their relationships with technology, it captures the commitment and patience required of participant observation, the cool and casual performance needed while one buys more time, and the eager curiosity that goes along with learning new social and technological systems and being able to keep up. In Whyte's *Street Corner Society* (1943), the key informant, Doc, once said:

'Go easy on the "who," "what," "why," "when," "where" stuff, Bill. You ask those questions, and people will clam up on you. If people accept you, you can just hang around, and you'll learn the answers in the long run without even having to ask the questions' (Whyte, 1943: 303).

This was the approach I adopted when beginning fieldwork in order to just get my foot in the door, both metaphorically and literally. During that initial meeting with the R&D Officer, the majority of suggestions I had for data collection were dismissed and denied, perhaps in part because that meeting was just weeks away from the implementation of the EU General Data Protection Regulation and The Company was being cautious about data and privacy. However, there also seemed to be a more subtle agenda. Just when I thought the meeting was a waste of time, the R&D Officer presented a counteroffer. The Company would allow me to conduct observational fieldwork of their activities whether it be a ride-along with a Field Officer or to observe work in the National Monitoring Centre during peak activity hours. Neither of these were part of the initial ideas I had for my project, but I needed a way in. From my background knowledge of previous research on EM in Scotland, it was clear what they were offering me was the 'usual' package deal given to several other researchers. I left that meeting by tentatively accepting the offer of doing one ride-along.

Participant observation is both a relationship and a process. Emotionally, it requires vulnerability on the part of the researcher to be gradually accepted and welcomed by the participant(s) and into their social world (Raybeck, 1992; Spradley, 1980). This can be a humbling process, as that initial meeting was for me. Nevertheless, even that meeting began to reveal important details about The Company such as the tension between the desire to appear transparent and open on the one hand, and defensive privacy and the need to be in control on the other. While they did let me in, the access they offered was to a very performed and manicured version of their work that they knew had been under academic scrutiny already. Yet, this was not a limitation. The strength of participant observation, as a method, is that it is about observing small details and everyday actions (O'Reilly, 2005). There would be a lot to learn from one ride-along but I also knew that by hanging out and spending more time with The Company, the defensiveness would eventually subside. At that point, it was important that I got in and by being performatively (and in many ways genuinely) enthusiastic, curious, and by 'geeking out,' I was able to carve out more space for myself within The Company and discover much more about EM from within the machine, as it were.

The participant observation work I conducted took place across three separate but interrelated EM activities with The Company: ride-alongs with Field Officers (6 shifts); during curfew enforcement hours in the National Monitoring Centre with Monitoring Officers (4 shifts), and daytime court report writing in the National Monitoring Centre with Court Report Writing Officers (2 shifts). This is actually the first study to include observations of the court report writing process of EM. In total, from October 2018 – November 2019 I spent approximately 70 hours in the field with The Company. Across all of these different activities, times of day, and from different EM Officers I gained insight into the complexity and contextual dynamics of how operational monitoring plays out, as well as the environmental and embodied experience of being present and part of these wide-ranging social and digital relations.

2.1 Ride-alongs and being the welcomed stranger

The majority of time spent with The Company was during ride-alongs with Field Officers. These were usually seven-hour shifts that took place at night from 5pm until 12am, but I always arrived early to the Monitoring Centre and squeezed in some informal time which usually meant each venture into the field in this way lasted around eight hours. My routine involved taking the train from Glasgow to the Monitoring Centre (which moved office

mid-fieldwork) and getting picked up at the nearest station around 4pm, usually by the R&D Officer who would let me know on the way in who had agreed to partner with me for the night and roughly what area of Scotland we would be covering.

The job of a Field Officer was to carry out work in the community, which involved visiting the homes of monitored people. Sometimes these were ‘induction’ visits, which included installing hardware in someone’s house (the box) and on someone’s body (the tag); or ‘deinstallation’ visits which were for people who completed their orders or revoked consent and therefore needed the equipment picked up; some were ‘denied absence investigation’ visits which involved testing the equipment and investigating why someone was recorded as absent (breaking curfew) but insisting they were not; and some were ‘low battery/replacement’ visits which required Field Officers to replace tags that had low battery life. There were other reasons for house visits, as well as multiple reasons for a single house visit, but these were the most common types I encountered.

Doing these shifts with Field Officers took getting used to. I would stay up late the night before and sleep in the next morning. I prepared by avoiding any taxing work during the day so that I would be fresh in the mind during the night and I often purposely went in slightly dehydrated to avoid too many supermarket bathroom stops given that we were mostly on the road. Being that the work was at night meant that I had few opportunities to take notes, especially in the winter when the entirety of the shift was in the dark. I eventually learned to take notes on my phone, so that it would not look as obvious and so I could do it even when the officer was driving.

The work involved a great deal of mobility and the majority of time was spent in the car with the Field Officer. I did six ride-alongs in total with five different Field Officers who were recruited as research participants, which involved providing them with a Participant Information Sheet (specifically for Field Officers) (see Appendix B) and letting them read it as the car warmed up. After answering some questions, I invited these officers to sign a Consent form (see Appendix C) to agree to take part in the study and explained what that meant in terms of data, privacy, retention, and the purpose of the project. While it is important to acknowledge that they might have felt pressured to agree because my gatekeeper was their manager, I always tried to mitigate this by explaining it would not be an issue if they changed their minds and that they could drive me back at the train station if they were unsure. Given the nature of this workplace ethnography, most members of staff roughly knew who I spent time with (or in other words, recruited as participants) and some

openly shared that they were involved in the research. This has implications for confidentiality, but this was largely out of my control and did not appear to put anyone at risk. Nevertheless, I went to great lengths to anonymise personal details about my participants and assigned them all pseudonyms.

This research received ethical approval from the University of Glasgow's College of Social Science Ethics Committee prior to commencing fieldwork. Nevertheless, ethics in the field can be quite different from those anticipated on a form. What was perhaps more challenging was negotiating the ethics of house visits and the participation of the monitored people we visited. I was particularly sensitive towards the ethics of entering someone's house, explaining who I was, and giving them the chance to decide whether they were okay with my being there and including it in my research. The Company had been adamant that I should not know or collect the names of the people visited and, while this was more ambiguous to navigate in practice while out with Field Officers who freely shared this information or would ask me to look up personal addresses on my Google Maps app, it meant that I could not evidence informed consent through the traditional method of a collected form with name and signature. There are many reasons why written consent can be inappropriate, whether it is culturally insensitive, inaccessible, or not suitable to the context of the fieldwork encounter (Murphy and Dingwall, 2007; ASA, 2011). While some scholars see this formalisation of informed consent as a burden of institutional ethical approval (see Haggerty, 2004), I argue it is important to uphold consent procedures and adopted a verbal consent procedure instead. In practice, I provided information verbally and made it more of an informal conversation, let the person agree or not to let me be there, and then I would leave them with an Information Sheet about the study which had details about the study and contact information if there were any questions/concerns (see Appendix D). Once the visit was over and I was back in the car with the Field Officer, I would have them initial a templated log sheet to attest that they witnessed verbal informed consent (see Appendix E), given that I was not allowed to use any audio-recording technology during my time with The Company.

In Chapters 5 – 7 (and below) which include field diary entries and examples from the field, I approach the question of anonymisation in a different way to interview participants. In acknowledging different forms of participation in research, and the unfeasibility of constructing names for the 23 people I encountered this way, I refer to these individuals by a single initial (J said this, B did that, etc.). The truth was that it was technically impossible to create pseudonyms because I did not even know the real names of these participants,

despite spending sometimes up to an hour with them in their homes. The conditions of the access I was given constrained me from knowing this simple but important detail about someone, even though I was there to sometimes bear witness to them undergo and be inaugurated as a monitored person.

Werth (2019) has reflected on a similar experience in bearing witness to people being placed on parole and the socio-material transformation it involves. I was concerned some people would feel pressured to say ‘yes’ to me in order to avoid conflict with the agent and agency supervising them and I was also hyperaware of the broader forces of power exercised during these visits. In fact, the first time I went into someone’s house on my first ride-along I admittedly panicked³.

It was a weird feeling for me crossing that door threshold. They didn’t know who I was, or what I was doing, yet I was accepting this invite into their home. I felt nervous. There were more young kids running about the house and a woman came to the door and invited us into the sitting room. The house was larger than I expected, and I can tell they spruced up for The Company’s visit. I was sitting there with the woman, who was A’s sister, as we waited for A to come downstairs. I still didn’t mention that I was a researcher and I have to admit I was nervous about this. I felt so intrusive. I thought maybe Jack would take charge of explaining my role, seeing that he was the one here on business but he didn’t seem to care about that. I remember thinking ‘that’s okay I’ll do it but I’ll obviously wait for A to arrive.’ Once A actually came downstairs, Jack just immediately began explaining the terms and conditions and asking A for ID. There was a minor discrepancy because the curfew was from 7:30pm – 7:30am, rather than 7pm-7am as A had thought. I didn’t know what to do. A’s sister kept looking at me and deferring to me for questions. She thought I worked for The Company and I felt my stomach drop. I felt like I was suffocating. I didn’t know what to do. The dog was jumping on my legs.

No thank you, I don’t want any tea or coffee.

Luckily Jack realised he left his work phone in the car. He handed me the keys and asked if I could go get it for him while he carried on. In any other situation I would have been annoyed at this, but I was freaking out and grateful for the chance to get a breather and collect myself. The cold air felt good.

(26/10/2018 field diary excerpt)

The way I handled ethics-in-practice on this first visit was admittedly clumsy and, after taking a moment to collect myself I went back in and clarified the misunderstanding. As

³ The names mentioned from this field diary excerpt, along with all names that will be mentioned in this thesis, are pseudonyms.

fieldwork went on, I learned to better openly communicate not just with those who I visited but also with the Field Officers who accompanied me and were entangled in my research process. I grew confidence, fell into a rhythm, and figured out how and where to place myself.

Aside from the practical aspects of ethics, it is important to consider the bigger picture of whether house visits and ride-alongs in this specific context are appropriate as a research strategy. I acknowledge that it is an exercise of my power and privilege to draw upon this method. Recognising the limits of this interpretation, I nevertheless observed that people were generally welcoming, or indifferent, to the idea of me studying EM and being in their home for that purpose. Initially, this was surprising because I constantly compared their reactions to my own if someone hypothetically came into my house late at night to ‘observe.’ However, I think that says something about my own privilege, as well as the systemic and pervasive disempowerment experienced by those routinely punished and entangled in the criminal justice system and how this was relatively unobtrusive compared to their wider experiences.

Being American made my presence a novelty but being a gender-conforming white American (cis)woman made me feel as though I was received as a *welcomed stranger*. In other words, I represented a very mild kind of strangeness that was met with amusement and curiosity from the predominantly white Scottish people I encountered. The significance of this struck me when I noticed that several people had similar black and white canvas photographs of my home city on their walls; signifying the commodification of where I come from and the cultural capital associated with it.

The significance of these fieldwork experiences helps to justify why I used this method. Sometimes I was someone to chat with while getting fitted with a tag, other times I was ‘one of Daddy’s friends’ and kept the toddler distracted while the father was walking the perimeter of the house. The opportunity to just be present and hang out during these visits revealed the rich, interactive, and complex dynamics of what it meant to do monitoring and what it meant to be monitored. The process of getting inducted, the value judgements that went into investigation visits, and the raw initial reactions people had to getting fitted with tags were invaluable to this project and makes visible this incredibly important interface in the EM network. Away from the direct oversight of their bosses, Field Officers had to negotiate and navigate their work, make on-the-spot decisions, and figure out how to report information back to the Monitoring Centre. Someone being monitored experiences

these occasional visits to the house by an unknown Field Officer in the night which can be intrusive, but the solo Field Officer spends the entire night, most nights, having to go into strangers' homes and adapt to each environment anew. This carries its own set of risks and vulnerabilities which are also worth exploring. There is power in the Officer being entitled to enter someone's house at any time of night without warning, but there is also vulnerability in a lone worker making house visits to strangers in the dark.

2.2 In the Monitoring Centre

In Scotland, service provision of EM is quite all-encompassing and includes material equipment, staffing of the national database centre, staffing of the field officers, management of an operating system, and commercial intellectual property related to breach criteria and data management. By comparison, other countries have been known to provide EM as a public service, to tender contracts to multiple companies, or even blend various elements of service provision between the state, private sector, and police. By 'following' the penal surveillance data, it made sense to spend time in the National Monitoring Centre where traces of data originated from, passed through, or left from. The Monitoring Centre changed location half-way through fieldwork which meant that the office space where I had that first meeting with my gatekeeper was different from the office space where I did my observations. In total, I spent just over 19 hours in the National Monitoring Centre as a researcher, divided up between evening shifts during 'peak' hours with Monitoring Officers (around 11 hours) and morning shifts with Court Report Writing Officers (CRWOs) (around 8.5 hours).

Monitoring Officers work in teams across two large tables, each fitted with six workstations/desks. By 7pm every night, one of these large tables is completely filled because it is the Scotland table which collectively monitors all of Scotland. By 7pm, the other table has one workstation filled but by 10pm another Monitoring Officer from the Scotland table joins this lone person because it is the Northern Ireland table which collectively monitors all of Northern Ireland (10pm is the 'peak' hour there). This is important to reflect on not just analytically, but also methodologically as it reconfigures and transforms this field site and expands its boundaries across time and space. A massive whiteboard is hung on the wall in between these two tables which lists all new 'jobs' for the night and general statistics which on the 18th of April 2019, for example, looked like this:

- 7 cars out
- 4 HDC installs
- 19 RLO installs
- 1 young person install (13 years old)
- 1 stand-alone
- 4 high priority installs
- 7 variations (change of address)

I began the habit of writing down details from the board in my field diary (excluding names, of course, which were on there) and became intrigued with keeping track of how they quantified this information. On that Thursday night in 2019, ‘cars out’ meant that seven Field Officers were deployed from the Monitoring Centre, although on-call Officers were also remotely located across the country. Any mention of an ‘install’ meant an induction visit, although these were categorised differently based on perceived risk and sentencing authority. ‘High priority’ installs implied a certain urgency as well as perceived risk category but were mostly just installs that should have been carried out the night before but either the person missed the visit or the Field Officer lost track of time. Another interesting statistic on this white board which was updated midday every day was the total number of ‘live tags’ in Scotland (SCO), in Northern Ireland (NI), or suspended tags which were for people whose orders had been suspended for one reason or another. I began writing down these numbers too (see Figure 1).

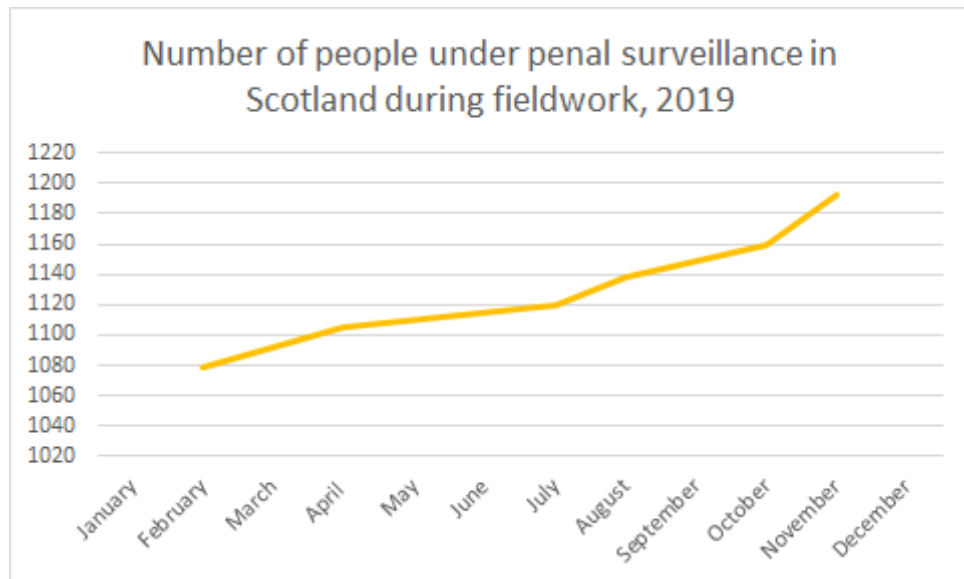


Figure 1, Number of people under penal surveillance in Scotland during fieldwork, 2019

The figure above (Figure 1) illustrates the number of ‘live tags’ written on that whiteboard, mapped across several months of fieldwork. This exercise was not to report back accurate and formal statistics on how many people were subject to EM, but to find ways of differently expressing the experience and practices of quantification going on around me and finding different ways of noticing change. It was semantically interesting that The Company centred these numbers as ‘live tags’ as opposed to people, but the gradual increase also illustrates the expansion of penal surveillance which I interpreted as an invisible expansion and scaling up of the traditional ethnographic field site (Star, 1999). This was an exercise in the vein of what Armstrong (2017) calls ‘seeing and seeing-as’ where I have taken in the local site of the Monitoring Centre but also imaginatively make visible the wider network of connectivity, of outsourced governance, and transnational surveillance which all overlap one another. Whereas the whiteboard in the main monitoring room provided all of this information, the smaller whiteboard in the back room where staff lockers were located provided more information about the Field Officers assigned to each car out that night. After several months immersed in this world, my name began appearing on that ‘insider’ whiteboard too.

When I conducted observations in the Monitoring Centre, I was always formally assigned to shadow one particular Monitoring or Court Report Writing Officer for the night/day who, once again, would have already volunteered to participate via my gatekeeper. By the time I began ‘hanging around’ the office formally this way, I had already been doing it informally and most of the staff knew who I was and had seen me around. The way participant observation was enacted in this space involved pulling up a chair and sitting

with this one Officer at their workstation. I always made sure to arrive at least 30 minutes before ‘peak’ hours so there was enough time to go over the details of participation and formally recruit this Officer (see Appendix F for the office-based Participant Information Sheet). However, as I have already mentioned, the team-based nature of the work meant that everyone else at the workstation was informally enlisted in the study as well. A total of 6 Monitoring/CRWOs were recruited during fieldwork, but it is worth clarifying that these job roles were not static and that the people who worked for The Company shifted in and out of different Officer roles, moved departments, or got promoted all throughout this time. As time went on, it was more than likely that I would sit beside my formal participant during an evening shift, but the rest of the table would be filled by other Officers I had spent time with as well. From a symbolic interactionist perspective, there was much to see and observe about how these Officers enacted monitoring by working together and using the technological infrastructure as a source of information (Blumer, 1969; Star, 1990, 1999).

However, I also felt I needed to dig further and situate the databases, the data itself, reports, templates, phone calls, software, documents, and even the system interface as active, social ethnographic objects in their own right as well rather than just things to be interacted with by people. While actor-network theory helped to situate ‘sensibilities’ towards this way of enacting ethnography, I have also drawn upon literature and strategies from critical ethnographies of visibility, data, and documents as well as the sociology of standardisation to explore how this happens in practice (Bosworth, 2007; Timmermans and Epstein, 2010; Seaver, 2017; Eaglin, 2017; Burns and Wark, 2019). The mundane computer-based work of writing reports, making phone calls, and data entry became exciting sites for the exercising of power and reconfiguration of multiple realities.

Monitoring Officers primarily made phone calls and did data entry, responding to the series of alerts (‘events’) that would queue up on their computer screens that recorded people who were not home in time for curfew (lateness), people who left their home mid-curfew (absence), or people who manipulated or attempted to manipulate the hardware (tamper/attempted tamper/change in power source). They also took incoming calls from monitored people who had questions, were warning they were going to be late, or needed permission to go to the hospital during curfew. Every monitored person had a profile in this system software, a database of time-violations (the accumulation of total hours, minutes, and seconds of absences), and a detailed activity log called the Event History Report. Court Report Writing Officers, on the other hand, extracted data from these

databases and logs the following morning and drafted reports to be sent to Sheriffs, the Prison Service, or Social Work.

This is the first study to ever observe the court report writing process of EM in Scotland. Ten months into fieldwork, I approached my gatekeeper about expanding beyond the work of Field and Monitoring Officers so that I could observe breach-work. I was able to infer that this was a two-fold process: (1) determining who has crossed the threshold into a formal breach category; and (2) constructing the breach report. I was told that the first process was ‘commercially sensitive,’ and access was denied, but my gatekeeper approved access to the latter process. Reflecting on my ethnographic practice, it made a difference that I had a relationship already built with The Company. If I had asked (or knew to ask) for this back during that first meeting, I am very sure it would have been met with a resounding ‘no’ as all my other suggestions had been. That access was granted because of the time already spent in the field and the rapport built with participants.

2.3 Writing about the field

During fieldwork, I maintained a field diary that contained general observations, dialogue segments, personal and emotional reflections, and analytical insights. Note-taking and diary-keeping is an integral part of participant observation and became a regular practice both during and after a shift in the field (Clifford, 1986). At this stage, the fieldnotes I had were more in line with what Emerson *et al.* (2010) refer to as ‘jotted notes.’ They were rough, short-hand, often in bullet-point format, and arguably illegible to anyone but me. This latter quality was mostly due to writing quickly when done by hand but slightly intentional as well. Most shifts in the Monitoring Centre involved sitting directly next to or in between EM Officers, which meant any instance of notetaking during a shift was visible to participants.

These manual notes filled up two small notebooks and kept securely at my home because they contained personal information about participants such as names, locations, and other details that could potentially identify them. However, for practical reasons, I did not use these notebooks when I was out with Field Officers at night. Instead, I began making entries in my field phone, specifically in the Notes application. There can be security concerns when using cloud-based apps for field notes, however I mitigated these concerns by using a separate phone for fieldwork that was password/fingerprint protected and not connected to any cloud storage.

I never took notes while in someone's house, but I did use it when in the car with Field Officers and must consider how that may be negatively seen (appearing distracted, disinterested, aloof, and other social connotations) by those participants (Gorman, 2017). However, despite these concerns, I overall found using a mobile phone to be a positive and beneficial experience. The backlight of the screen allowed me to take notes in the dark, offered more privacy, and allowed me to quickly open my notes or store them away with the click of a button. The auto-fill text feature on the phone also made notetaking less time-consuming. Perhaps most significantly, it made the highly visible practice of ethnographic fieldnote-taking less conspicuous. As I mentioned earlier, there are varied social connotations that accompany the ubiquitous image of a person looking at and engaging with their phone. However, I would also argue that in the present contemporary society in which we live, the act of scribbling hand-written observational notes in front of another person is a far more jarring and uncomfortable experience.

3. Unstructured interviews

Ethnography, of course, can involve far more than just participant observation. In addition to the observations I was carrying out with The Company, fieldwork also involved interviewing people who were presently or had previous experience of being subject to EM in Scotland. While participant observation and ethnographic encounters are more 'naturalistic' compared to other qualitative methods, this chapter has also demonstrated the many ways that researchers, including ethnographers, are also an 'intervention' or disturbance in social order (Burawoy, 1998: 14 – 17). These ripples, however, are not definitively good or bad, but something to be reflexively aware of during fieldwork, analysis, and the production of new knowledge (Lichterman, 2017). As opposed to the performance I had to put on while hanging out with The Company, using an interview method allowed for me to extend myself out into the field in a different way by being more direct and purposeful in data collection. While some argue that interviews are limiting and too staged or scripted (see Dunn, 2007), the experience of using this method in this study was enriching and shed light on very different ways of knowing EM. This method had distinctive strengths such as a depth I was not able to achieve through the casual conversations I had had with monitored people during house visits.

In total, I interviewed 10 people who had 'lived experience' of being subject to EM. While this study does not explicitly draw upon phenomenology or feminist phenomenology as such (nor does it deny the overlaps), this was the orientating frame I used to conduct these

interviews which helped to set expectations for potential participants given the growing use of the term by academics, practitioners, and policy-makers in Scotland alike (McIntosh and Wright, 2018). These interviews were unstructured in that there was no guiding set of questions or topics besides that of being monitored. The purpose of these interviews was to counterbalance that ‘executive approach’ to research mentioned earlier (Star, 1991) by listening to and documenting the moments from the everyday lives of those most deeply affected by EM and the stories they shared (Denzin, 1997). However, the ontological position of multiplicity (Mol, 2002) that I have adopted for this study makes an important departure from the assumptions underpinned by the phenomenological approach which is politically concerned with representing a singular reality from the vantage point of those with lived experience (McIntosh and Wright, 2018). Instead, I approached these interviews as a ‘purposeful coproduction of social data’ which involved more of an active exchange of situational and relational knowledge between myself and participants (Peck and Theodore, 2012: 56). Namely, this meant I was open about the participant observation I was concurrently doing with The Company which provided some background information to ask more detailed questions of participants.

Recruiting participants for interviews was a difficult part of fieldwork. People subject to EM get little to no support in the community for enduring that experience. For that reason, I knew before beginning data collection that I would likely need gatekeeper assistance to help connect me with potential participants. I mentioned earlier in this Chapter that I had approached The Company in April 2018 with a research idea that was rejected and reconfigured as observational work. The original plan I had in mind was to ask Field Officers to distribute flyers about the study and recruitment call when making visits. This did not work out which was arguably for the best. Instead, I approached a number of third sector organisations about the project and spent two months sending emails, taking calls, and going to meetings with representatives to see if this was something they would be interested in or had the capacity to help with. At the time, the call was to meet for a series of interviews (the total number could vary) which seemed, at the time, to better compliment the broader ethnographic methodology of the study. I was also willing to explore creative exercises in these interviews, such as photo-elicitation, which could be worked on and explored over a few sessions. Out of the 40-odd organisations I contacted, only two organisations seemed keen and willing to help recruit via the people they support and work with. This was admittedly a frustrating time and it forced me to reflect on my approach and data collection. Two issues emerged. First, it may have been that the multi-interview, creative methods I wanted to use were not feasible and asking too big of a

commitment considering I was not providing any material (i.e. financial) incentive to participate or to recompense people for their time. While such approaches are rapport-building, participatory, and can be empowering (Rose, 2011), I needed to reflect on how time-consuming this was and that just as much as these kinds of approaches can be ‘giving,’ they can also be ‘taking.’ Second, there was a stark lack of services provided in Scotland that directly acknowledge electronic monitoring. EM primarily was a stand-alone order, meaning that being ordered to a Restriction of Liberty Order does not innately involve any other form of supervision/support. I attempted to access these other community justice routes, organisations, and spaces that might overlap with an EM order but was denied on the basis that this project did not directly benefit these other organisations.

I decided to make changes mid-fieldwork and adapted my plan to ensure I completed fieldwork within a reasonable time frame. I had already recruited one interview participant using the former approach which meant we met multiple times and included photo-elicitation exercises as part of our meetings. This means I interviewed a total of 10 people, but I technically conducted a total of 14 interviews. However, after these series of interviews ended, I put out an updated call for participant recruitment which only involved an unstructured, one-off interview. The rest of my interview participants were recruited through this new strategy. I also began advertising the study via new media such as social media advertisements, online advertisements, and radio advertisements (see Appendix G for Twitter advertisement). This advertisement went out from my personal Twitter account as tweets which collectively received nearly 100 retweets; as an online classified ad on Gumtree (I geographically rotated the post every week across different postcodes in Scotland); and, I worked with a local community radio station in Glasgow to record my advertisement for their listeners (using my own voice!). Lastly, I was put in touch with a community ‘Throughcare’ officer who provided general support to young men coming out of prison⁴.

Out of the 10 people interviewed, two were recruited via support organisations (criminal justice/mental health), two were recruited via Throughcare support, and six were recruited from online/media advertisements. Every participant was provided with an Information Sheet (Appendix H) which would be discussed, they signed another document to evidence

⁴ Throughcare service was a voluntary support scheme offered by the Scottish Prison Service from 2015 – 2019, which paired former prison officers as Throughcare support officers with people being released from prison.

informed consent (Appendix I), and also agreed to have the interview audio-recorded. While I did not collect formal demographic information about my interview participants, basic demographic information informally emerged through the interview process. All of the interview participants identified as men and ranged in age from 18 – mid-50s. Three participants were from a Black, Asian, or minority ethnic background and seven were from a White background (British/Scottish/Irish/Other). Two participants were originally from England and had lived in Scotland for several years, and another two participants had dual citizenship with the United Kingdom and another country. Interestingly, the five people recruited from Twitter and Gumtree were all fathers, married/divorced, and had either a postgraduate level education, held a corporate job, or owned their own business. This is perhaps indicative of a broader ‘digital divide’ amongst participants based on a number of social and economic factors, which highlights the effective but limited reach of online recruitment methods (Losh, 2009; Bryne *et al.*, 2010). In terms of justice-involvement, all participants had experienced periods of time both on a tag, as well as time in prison (closed and/or open). Some participants had been subject to EM more than once and most participants also experienced other forms of community supervision. At the time of the interview, four participants were under some form of criminal justice control.

While changing the interview strategy meant that there was a loss of longitudinal depth to the interviews, what I gained instead was a greater range and diversity of experiences from participants who were willing to meet with me just that one time. This change also allowed me to be more direct and focussed in the interview. The interviews I conducted were unstructured in format, and an effort was made to explain that before meeting, so that participants would know that I would not have a strict set of questions. Interviews were arranged by phone where we would agree to meet somewhere both of us were comfortable travelling to and from. This included cafes, pubs, libraries, supermarket cafeterias, pizza shops, student unions, malls, and support organisation conference rooms. I met with people in Glasgow, Edinburgh, and further abroad outside of the ‘Central Belt’ as well.

Some participants flourished with an unstructured format and could talk for hours with very little prompt from me other than gentle steering or if I wanted to follow-up. I used a lot of non-verbal affirmations such as head nods and facial expressions to let them know I was involved without disturbing their flow of thought and speech. When the topics went slightly off-track, I allowed more flexibility because I realised that my participants had a lot to say and found the interview to be a positive outlet.

For some other participants, the unstructured format was unfamiliar, and they needed time to adjust. I was more involved in the conversation with these participants and found it helpful to ask them to revisit something they said earlier if there was a lull in conversation. Doing unstructured interviewing made me realise that while the lack of structure could be liberating and empowering for some people, it could also be intimidating for others.

Appreciating this has helped me to reflect on the interview I conducted with Lewis, which went wrong in many ways. There were several external factors that I either did not anticipate or did not think through thoroughly enough. The meeting was arranged by a mutual contact, Lewis' Throughcare officer. However, I did not know that the Throughcare officer was also using that meet-up with Lewis to introduce him to his new social worker as well. This caused some confusion and with retrospect I can see that I should have suggested meeting at another time. In that moment, however, I introduced myself as I had with other participants and explained the study, provided the information sheet, and he consented to participate so we went and grabbed a table away from the social worker and Throughcare officer. The recorded interview with him was just under 8 minutes. During that time, he rarely looked me in the eye and gave one-word answers, so I turned the recorder off and ended the interview. He had begun to scroll through social media feeds on his phone and made it clear he was disengaging. I asked if he was okay, and he said he was, although he did not want to answer long questions like that. He also told me he was not as comfortable with the audio-recorder as he thought and did not like doing the interview at a location so close to his home, just in case he ran into any of his friends. According to Lewis, it seemed 'shady' because the only other occasion where he answers questions this type of way is in police stations. We ended up having a longer chat to clarify what had happened and then turned it towards what he wanted to do and that it would be okay if he changed his mind. He decided that his participation still counted and that what was recorded already was fine to use in the study but that he did not want to be interviewed any further. Along with all of the external and environmental factors that were not ideal for this interview, that last comment he made about the police stuck with me because it also reflects on the interview format and something I assumed most people would find 'empowering.' Lewis did not find that interview experience with me to be 'empowering' in any way. There were a host of reasons why he was uncomfortable, but reflecting methodologically, the interview structure and format was part of the problem.

This component of the fieldwork experience was a learning process, challenging, and scrappy. However, it was also incredibly rewarding and the opportunity to hear from people about their experiences of EM has fundamentally shaped the findings of this thesis.

4. Deciding to exit the field

Fieldwork was concluded in November 2019 and ended with a final evening shift in the Monitoring Centre. Compared to traditional anthropological ethnographic fieldwork, the time I spent immersed in the field was shorter, more sporadic, and more mobile. However, the nature of ethnographic fieldwork depends on the object of study and certainly external access factors. It would not have been possible to spend 18 months with The Company because they have commercial priorities and no obligation to assist me more than they already had. The ride-alongs and office observations were several hours each, involving meeting several dozen people being monitored (and their families and co-residents) each night, as well as overhearing hundreds of phone calls and readings dozens of reports sent to court. I could have continued and met a handful of new people every single night and pushed back my exit date, but I reached a point where I determined I had enough to move on to the next stage of research. This was based on recognising repetitive patterns in fieldwork but also recognising that the notion of ‘saturation’ can also come from ‘difference within’ as opposed to sameness (Jackson and Mazzei, 2012). I determined that I had enough data from all these diverse and differently situated actors which sufficiently opened up and explored EM and I was ready to commit to full-time data analysis. I immediately began transcribing the 9 hours, 51 minutes of interview data I had and thoroughly reading (and rereading) 101 typed pages of fieldnotes.

5. Analysis

Demonstrating the analysis of ethnographic fieldwork and process of generating findings can be a complicated endeavour, particularly when working with different forms of data such as fieldnotes and interview transcripts. I argue that ethnographic data analysis should not be glossed over but nor should it be as sanitised as a rigid and systematic framework. To begin, it is important to discuss logics of enquiry and the relationship between theory and data which are both vital to the way I approached data analysis. Unlike inductive approaches to research, the logic of enquiry for this study does in fact engage with existing theory and broader concerns about constructing knowledge about the social world. Previous chapters in this thesis are broadly built around arguments related to ontology, epistemology, and how we may begin to reframe the way we think about penal

technologies. While I do not classify this research as ‘theory-driven’ or ‘hypothetico-deductive’ (see Burawoy, 1998), it is important to consider how theory might be recognised and drawn upon in ethnographic research without over-powering the experiences of participants and leaving room for the spontaneity and surprises inherent to ethnographic research.

My data analysis has been largely informed by Jackson and Mazzei’s (2012) work *Thinking with Theory in Qualitative Research* which presents a different, non-prescriptive sensibility towards data, theory, and analysis largely informed by poststructuralism and what the authors refer to as ‘posthumanism’ in which research and its various outputs might best be considered as assemblages. In moving beyond mechanical coding and the separation between data and theory, Jackson and Mazzei (2012) propose theory not as something to be applied, but rather, as a process of thinking and putting ideas/concepts to work in an effort to reframe or rearticulate them through fieldwork. In my own interpretation of this, I began putting ideas to work before, during, and after fieldwork. Therefore, although the structure of this chapter implies that analysis follows after fieldwork, the process of analysis began the moment I entered the field and began taking down notes. In fact, as mentioned earlier, the very practice of fleshing out ‘jotted notes’ into richer and detailed fieldnotes is a key interpretive moment and part of the analytical process (Emerson *et al.*, 2010; Yanow, 2009).

I conducted a very preliminary initial analysis after about six weeks in the field as an exercise to take stock of what kind of data I was gathering and how I should begin to narrow focus. I attempted to identify what felt significant, what else I wanted to explore, and what ideas, concepts, fragments, or literatures might help expand my thinking. This iterative process is not entirely unlike the technique of ‘constant comparison’ but carried out in a less systematic and constraining way (see Glaser and Strauss, [1967] 2012). Drawing upon a term from Deleuze and Guattari’s (1987: 4) *A Thousand Plateaus*, Jackson and Mazzei (2012) take forward the concept of ‘plugging in’ as a way of thinking about the continuous process of un/making knowledge through arranging and fitting together different combinations of data and theory to create something new. For example, the broad theme of ‘space and place’ and particularly the spatial logic of how The Company measured the area of a monitored person’s home struck me as a new direction for research. One way I began to think through the data was by plugging in ideas on ritualism and noise to better understand space-making practices (for findings related to this, see Chapter 5). Another example involved some jotted notes I had scribbled down

about hand sanitiser (pre-pandemic, acknowledging that sanitiser holds different meaning now) that did not strike me as significant until I began to write about it in combination with literature on embodiment and dirt. The process of writing itself was analytical, revealing, and actively shaped this ethnography as opposed to passively documenting it (i.e. ‘writing up’) (Clifford, 1986; Yanow, 2009). Just as data and theory were plugged in, so was I.

Analytically, I began paying more attention to phenomena and concepts that came up in multiple sites or by multiple people, particularly when they came up in different ways. For example, there was this notion about EM surveillance ‘blind spots’ that came up during fieldwork in many different ways. Sometimes it had to do with an inaccurately measured border around a monitored person’s house that a Field Officer had to readjust; other times it was in the Monitoring Centre as someone was reportedly not home during curfew but answered the investigatory phone call insisting it was an error; it was brought up by interview participants who described rooms in their homes or things they could not do because it would block signal; or even brought up as a way of circumventing curfew. None of these examples were similar, but they all revealed what Jackson and Mazzei (2012: 4) consider ‘*difference within*’ which is a way of exploring ideas of power, surveillance, and subjectivity by breaking open the concept of the ‘optics of EM’ rather than attempting to codify, clarify, or only pursue patterns of sameness. This involved making and unmaking different iterations, combinations, and arguments. By putting concepts to work in this way, data and theory came together and revealed new dimensions and experiences about penal EM. Penal surveillance was a messy practice and I often noted how issues were resolved out of necessity to make it appear administratively tidy. In practicing reflexivity, I wanted to ensure I did not do the same via the research process.

In addition to this more manual technique for analysing data, I decided to revisit the interview data using NVivo, a qualitative data analysis software, to further explore this data on its own and draw more upon the experiences of those who had been subject to EM. The nodes I used were based on tentative broad findings already developed (see Appendix J for the nodes used). This final stage of analysis helped to reconfigure the final versions of my research findings by plugging in new data to ideas that were already forming but also revealing that there were new ideas that did not fit into the existing nodes and therefore constituted additional findings particularly around the temporality and routine of being subject to penal surveillance (for findings about this, see Chapter 6). These methods of analysis opened up new ways of thinking about penal EM. By drawing upon the technique

of ‘plugging in’ and engaging with the data-theory relationship, these findings make both empirical and conceptual contributions to knowledge (Jackson and Mazzei, 2012).

The way the analysis and findings of this study are structured is through the three research questions established at the start of this thesis. Chapter 5 will explore the EM network and analyse the diverse relations between different people and things entangled in penal surveillance. Chapter 6 explores the everyday experiences of both being monitored and doing monitoring, highlighting different experiences of power from these positions as well as interactions between these seemingly opposed actors. Chapter 7 identifies specific mechanisms of power related to the governance of EM and analyses how digital technologies transform the punishment experience, which is inextricably linked with questions of representation and communication.

Conclusion

This chapter has covered the design and conduct of this study including my methodology, data collection methods, and analysis process. This includes the ideas and ways I have been thinking through concepts, how I put these into practice, and reflexive considerations for studying EM in this way. The aim of this study is to untangle the networked governance of penal surveillance through a deeper understanding of what it is like to both be monitored and do monitoring. This calls for reframing EM beyond its associations with prison and studies that seek to quantify, typologise, or objectify EM as a tool. Instead, this chapter situated how I instead explored the experiential and messy relations involved in monitoring practices. In order to challenge the assumption that EM is exclusively a social (i.e. human) enterprise or that it should necessarily be framed in the context of how to expand its use, there is need for critical and engaged research grounded in the experiences of the many people and ‘things’ that become entangled in EM.

This began with situating the methodology I developed which draws on ethnographies more familiar to criminological enquiry but also draws upon ways of thinking from broader subject areas concerned with the social-material and social-digital relationship. Informed by concepts of mobility, multiplicity, and mess, the methodological orientations I have engaged with have significantly informed the data collection and analysis methods I carried out. Then I identified the research methods I used in the field, namely participant observation and interviews. In quite significant detail, I have demonstrated how access was negotiated, how I got ‘in,’ the significance of these methods, and reflections on ethics and

the research process. Lastly, I justify and demonstrate the way I went about analysing all of the data collected after 13 months in the field. The next three chapter will detail the findings produced from this study, which explore the penal surveillance network and open the ‘black box’ of EM (Latour, 2005).

Chapter Five: ‘Confirmed by default’: System narratives and networked penal surveillance

Introduction: Mapping the penal surveillance network

Hiding behind the simplistic acronym ‘EM’ was a complex system of people, objects, sites, symbols, technologies, practices, and experiences. People were ordered to community sentences, released early from prison, or on licenses that involved wearing an electronic device, or tag, on their bodies. This device was digitally connected to a base unit, or box, in the home which transmitted surveillance data to a remote site called the National Monitoring Centre. This surveillance data was uploaded into system software, which translated the surveillance data into actionable ‘events’ or alerts to be handled by EM Officers. EM Officers telecommunicated with monitored people and/or co-residents and uploaded further information into the system software; they visited the homes of some monitored people to resolve issues face-to-face; and/or communicated information via written reports to relevant authorities (Sheriffs, Prison Service, etc.) who ordered people to be subject to EM in the first place.

EM involved different cycles and flows of relations between people, things, and places. In line with the theoretical approach outlined in the previous chapter, it was a network of fluid, shifting connections and associations between people and things (Latour, 1986; Law, 2008). The EM network was not ‘out there’ as a fixed, singular reality to be established a priori to fieldwork, but enacted through a web of relations that had to be experienced and observed between those subject to, involved with, or entangled in penal surveillance.

Unlike the archetypal ‘total institutions’ of criminological enquiry, penal surveillance was a heterogenous, fluid, incomplete system (Goffman, 1961: xiii); a ‘careful plaiting of weak ties’ (Latour, 1996: 370). Although many people and things across the network communicated with one another, there were ‘multiplicities’ of realities, truths, and experiences (Mol, 2002; Law, 2008). For example, there were often situations that arose where the system software recorded someone as being late or absent for curfew but when an EM Officer phoned that person, they contested the absence and argued they had been home the entire night. In another specific situation, a man admitted he had unplugged his box and ‘taken it for a walk’ to his neighbour’s house where it was quickly plugged back into a socket, yet the system software recorded this simply as a dip in power source. These different realities were complex, often partial, and not always coherent. Nevertheless, these micro-level examples reveal much about the operational processes and networked

governance of EM which will be further explored in this chapter, and also built upon in the next two chapters as well.

These three chapters will detail the main findings from this study. This chapter in particular will explore who and what was involved in penal surveillance and how these different actors were connected to one another. As people were governed from afar and digital systems mediated the punishment process, it was revealed that EM required the generation of ‘system narratives’ to make visible different versions of reality that could be more easily processed and filed in The Company’s databases. Distinctions between what was social and what was technological blurred, manufacturing ‘hybrid’ realities that relied on a combination of machine automation and human discretion/interpretation (Brown, 2006).

The sections within this chapter will discuss and evidence this claim. First, ‘The Company’ will be discussed as a significant part of the penal surveillance network, but the distinct nature of penal surveillance meant other people and organisations were also unexpectedly entangled into the maintenance of EM as well. The networked governance of EM will then be explored in the second section, including how authority was exercised at a distance, how EM Officers and monitored people experienced space in different ways, and how ‘system narratives’ depicting particular version of events were manufactured by digital systems in ways which often made them hard to refute or change. The last section will explore arguably one of the most quantified, but nonetheless debateable, metrics of community punishment, which is the notion of compliance. I explore how digital technology and surveillance changes what compliance meant and how it was measured. Penal surveillance operated in many places and spaces, but for the purpose of this study, it was best understood and ‘followed’ through situated, observable connections which I then explored via dialogue with existing theoretical and empirical knowledge. By so doing, I have fortified but also expand beyond existing understandings of EM.

1. The Company: More than a lanyard?

The enactment of electronic monitoring was not realised by a single task or device, but via an assemblage of people, places, objects, and actions. The staff who worked for The Company were divided into different operational roles, all of which came with their own distinct discursive practices and knowledges. The lanyards around their necks were often the only thing uniting the work that each person carried out as there were no marked

uniforms, vehicles, or bags. In addition to functioning as a pseudonym, The Company is the conceptual representation of the commercially global, yet operationally localised EM regime in Scotland during the time of fieldwork. It operated simultaneously up-close through the devices left on people's bodies and their homes and, yet, also at a distance through remote surveillance practices (Nellis, 2009; Latour, 1996). Main operations were based at the National Monitoring Centre, located in an industrial park on the periphery of Glasgow. Here, there were teams of office-based Officers, middle/upper management, and the system database and software used for operational work. Yet, roving Field Officers and the equipment left behind at the residences of monitored people all operated remotely, each acting as a capillary node or an 'embranchment' of The Company (Latour, 1996: 374). The following sub-sections will explore The Company as a loosely constructed work identity, the environment and culture of surveillance that permeated the organisation, how its private sector status impacted the enactment of monitoring and its relations with other criminal justice agencies. Lastly, this section will cover how other people, organisations and things beyond The Company were (often unexpectedly) entangled and enlisted into the maintenance and consequences of penal surveillance.

1.1 The devices and people of EM

Operational staff were categorised by officer type: Monitoring Officers, Field Officers, Court Report Writing Officers (CRWOs), and Compliance Officers. Each of these significantly differed. Monitoring Officers were desk-based and occupied the workstations at the National Monitoring Centre by responding to alerts produced by the system software. Field Officers began and ended their shifts at the National Monitoring Centre but spent their shifts driving around regions of the country to make visits to the homes of monitored people for investigations, repairs, and inductions/completions. Court Report Writing Officers (CRWOs) drafted and sent reports about monitored people to judicial authorities such as Sheriffs, Social Work, and the Prison Service when there was a breach, a request for an update, or the end of an order. These were the main activities permitted for fieldwork observation, but other (unobserved) roles in The Company involved checking breach thresholds, auditing, and more middle management positions. Some staff circulated between different Officer roles whereas others only performed one. For example, I spent time with 'Jen' (not her real name) during one of her nights as a Monitoring Officer but also ran into her during fieldwork as a Field Officer and a CRWO. This was opposed to Doug who was only a Monitoring Officer, although he had ambitions to train as a Field Officer soon. There was also some observable upward mobility and incentivised working,

for instance, when Jack was promoted from Field Officer to Team Lead or when Gwen was moved over from CRWO to Compliance Officer. The office was not static; people, objects, and machines constantly circulated throughout and were always on the move. Middle and upper management included Team Leads, the Research and Development (R&D) Officer (also my gatekeeper), Operations Managers, and the Service Director. The latter two of those worked in segregated office spaces whereas the others worked ‘on the floor’ with operational staff. The roles and responsibilities of different Officers will be further analysed later in this Chapter and throughout the next two as well.

Along with the more obvious technological infrastructural system used for receiving transmissions from remotely located boxes, there were other socio-material objects used to enact monitoring including: phones (and maps) for contacting monitored people and finding addresses; information boards displaying on-shift employees, induction numbers, and car registration plates needing an MOT; and rows of screens and computer monitors used for emailing, monitoring, data entering, and auditing. While a few members of staff made life-long careers working in EM and some devices and software were commercially owned by The Company, many objects, experiences, and skill sets were repurposed through various techniques for the purpose of EM. The boxes, tags, installation tools, and equipment maintenance software, were all engineered for the singular purpose of penal electronic monitoring. Yet, they were used alongside out-dated, long-discontinued mobile phones (circa early/mid 2000s) fitted with specialised software for diagnostic tests during house visits (especially ‘denied absence’ investigations); they used standard report-building and data wizard software to preload report templates for different types and levels of breaches; even individual staff members used previous work experience to navigate their work in EM. Some had worked in surveillance or criminal justice-adjacent roles in the past such as drug and alcohol counsellors, prison officers, and CCTV operators. However, some officers had more unlikely backgrounds and nevertheless used those skills to make sense of their work: bartenders, rugby coaches, supermarket managers, bookmakers, and even food delivery drivers.

He told me he’s used to it from his previous job as a pizza delivery driver; that this job was similar in some ways because it involves a lot of driving and knocking on people’s doors. Behind each door is a like a total unknown and you have to be prepared for anything or anybody, or at least be able to adapt. He told me that he understands the home is a person’s private space, where they are most comfortable, and that being at ease in a private space looks different for everyone.

(26/10/2018 field diary excerpt)

I asked Louise how it was working for The Company. She has been doing this job for about 2 years now, and loves the freedom and excitement of it, but also the stability of having set hours. Before this, she told me she worked in pubs and for various bookies. The clientele was the same though. I asked how? She didn't really know how to articulate it, but she said the type of people she comes across in this type of work are the same type she's collected money from or saw regularly in the pubs during daylight hours.

(8/11/2018 field diary excerpt)

The Company then was comprised of people with quite eclectic backgrounds and knowledges. All of the people and technologies enlisted in the enactment and enforcement of EM were under the umbrella of The Company, but it was nevertheless a hodgepodge; a loosely held assemblage and identity.

1.2 Workplace surveillance

The physical and infrastructural layout of the National Monitoring Centre and other sites of EM enabled a high degree of lateral surveillance. Although The Company moved office space in the midst of fieldwork, both old and new spaces for the National Monitoring Centre were open plan and corridor-less spaces, and any interior rooms such as conference spaces and upper-management offices were demarcated with glass walls. The office was access-controlled at both old and new spaces, although the new space was housed within an independent office building that was controlled by its own security management staff. The Officers grumbled about this latter feature and found ways to circumvent the new rules placed upon them, including sneaking me in through side doors so I would not have to sign into the building. The new space had windows which let the sun shine in, reflect on the glass walls, and across the span of the office, accentuating what Steiner and Veel (2011: 216) refer to as 'an aesthetic paradigm of perceived visibility.' The material design of the Monitoring Centre was a product of surveillance culture. Monitoring Officers worked at large tables like teams, with Team Leads hovering nearby. During an observation shift with Doug, a Monitoring Officer, he had minimised the system software to look up something work-related on the computer's internet browser. Within 10 seconds, a Team Lead had already come over and stood behind Doug to watch and enquire about what he was doing.

The Company was an 'electronic panopticon,' then, not just for the people sanctioned to EM, but also for the actors involved in penal monitoring (Ferne and Metcalf, 1998).

Workplace surveillance is not a new phenomenon, nor does it make The Company unique. However, it foregrounds that even surveillance companies were not immune to the ‘technosocial and especially digital present’ (Lyon, 2013: 101). There was also something uncannily satisfying about observing how the monitors reacted to being monitored, such as the eyerolls, grumbles, and ways that they sat up straight in their seats when corporate executives paid visits. The material and digital architecture/infrastructure of The Company was informed by a lateral and diffused ‘culture of surveillance,’ often linked to the surveillance work they themselves carried out (Lyon, 2018).

More so than human managers, the system software demanded the most ‘digital exposure’ from staff (Harcourt, 2015). Every entry made into the system about a monitored person also required information about the officer inputting the data. Every outgoing call, every incoming call dealt with, every warning or question they answered, was uploaded into the database, where they more or less knowingly accounted for their every decision and action. This culture of surveillance extended out to other activities and Officers across the network, including remote Field Officers. Before entering anyone’s house for a visit, ostensibly for safety reasons, they would manually pinpoint themselves in space and time for safety by holding down a button on a device around their neck and speaking into it, reciting their name, the time, and that they were ‘booking in’ for the visit. It was a one-way device, meaning no one acknowledged receipt of the message, nor did it transmit to the National Monitoring Centre. Instead, this information was stored by an external agency in Northern Ireland and none of the Field Officers I spent time with knew more than that. However, this practice gave them comfort and supports Berry’s (2019: 5) notion of the ‘benevolent gaze’ of surveillance which contradicts the inherent assumption within criminological literature that surveillance is always oppressive (Cohen, 1985).

1.3 Commercial commitments

EM was primarily a ‘stand-alone’ sanction in Scotland during the time of this fieldwork, which meant monitored people were supervised exclusively by The Company rather than receiving additional support or supervision from other criminal justice agencies (Graham and McIvor, 2015: 6). Along with neighbouring countries England and Wales, the involvement of the private sector in EM in Scotland is more extensive than is typical throughout Western Europe. The Company provides equipment and enforces the monitoring service rather than doing just one or the other. As a contracted service, the contract has been awarded to different bidding companies every few years, with slight

variations to upper management and the logos on staff lanyards, ID cards, and affiliated apparel. Yet, the operational staff and middle management remain consistent, transferred over from government contract to government contract, with some EM Officers employed for over 20 years. Individual staff members and monitored people hold different interpretations of The Company, linked to it being private sector. For example, unlike the other Field Officers, and as an individualised practice of image management, Pete introduced himself to people as simply a representative of ‘Electronic Monitoring’ rather than The Company. Most monitored people understood that The Company was private sector, but there was some occasional confusion where people assumed Field Officers visiting them were Police. Granted, for those on concurrent technology-enforced curfew orders and non-technology enforced curfew orders, they were visited by both The Company and the Police. EM Officers who had worked under multiple contract holders would casually compare different companies and the pros and cons of working for each. Others, such as Dave, generally reflected on working for The Company in both a local and global context, particularly in light of the many newsworthy, nationwide scandals linked to the most recent contract holder (see Ford, 2015; Nellis, 2017).

It was just after 11pm now so we headed back to the office. On the way, Dave told me about his opinions working for The Company. He says he has a brother who’s a ‘lefty’ and always antagonises Dave at family events for working for a private sector company like The Company. Dave says he understands the negative connotations, he’s read the news, etc. but that a job is a job and he chooses to see his own individual work as a positive thing.

(14/3/2019 field diary excerpt)

The Company had its own financial and commercial commitments, in addition to the criminal justice service it was contracted to provide. I previously mentioned the ways in which officers were laterally surveilled, but there was also a major workplace emphasis on time-keeping associated with the service contract. Shifting colours of green, red, and grey kept the eyes of Monitoring Officers glued to their computer screens during peak hours as they sorted through different ‘events’ appearing on their screen. The colour-coded signals not only generated a pre-determined risk level of the monitored person and issue, but also the amount of time The Company had to respond in order to avoid being fined by the Scottish Government. Monitoring Officers had minutes to react to a ‘Left During Curfew’ event or suspension of someone’s order and CRWOs had hours to file reports. These practices were demonstrative of The Company’s adherence with the formalities of their contract as well as the effects of global current events, particularly recent probes into

alleged corporate fraud amongst other scandals (see Nellis, 2014, 2017; Ford, 2015). Although it was privately-run, EM was a publicly funded service (at a cost of £40 million for a 5-year contract). The Company was contracted by the national government and subject to audits and fines, yet it also had its own private commercial imperatives, demonstrates the unique hybrid qualities of The Company as both a public and private actor. Some EM activities were public domain but others, such as the breaching process, were ‘commercially sensitive’ and therefore off-limits to outsiders such as curious academic researchers.

1.4 Extending out and entangling others

Linked to Foucault’s (1980) analysis of micro- or capillary power is the notion that actor-networks are ‘fibrous, thread-like, wiry, stringy, ropey [...]’ (Latour, 1996: 370). Beyond The Company itself, many other people and things were drawn or ‘roped’ into the penal surveillance network through various visible and invisible connections within and outside of the typical justice system, but nonetheless vital to the operations and enactment of EM. This includes more obvious examples, such as those subject to penal surveillance. However, this sub-section will also explore broader associations across the network and how others were seemingly entangled in penal surveillance.

A surveillance network requires something to watch in order to function; every ‘us’ needs a ‘them’ (McCahill, 2007). Particularly in the context of criminal justice, surveillance can exacerbate existing social divisions with some populations ‘more intensely connected’ to the network than others (*ibid.*; Latour, 1996: 371). Therefore, an important actor to mention that was vital to operation at The Company were ‘MPs.’ I made the mistake in the initial hours of fieldwork by assuming EM Officers were referring to Members of Parliament. Instead, ‘MP’ was an abbreviated euphemism for ‘monitored people.’ In line with the international movement of using person-centred language within public health, criminal justice, and many other social contexts, Scotland had pioneered formal adoption of such language into policy, including its national criminal justice strategy in 2016; for example, changing the terminology from ‘offenders’ to ‘people with convictions’ (Tran *et al.*, 2018; Scottish Government, 2016c). Yet, the constant abbreviation used by The Company took on a new meaning of its own over time, and arguably had its own dehumanising effects. ‘MP’ was, admittedly, a convenient linguistic abbreviation. However, it was also indicative of a discursive system of representation that informed practice (Foucault, 1980). In line with the aims of bureaucratic discourse, EM Officers

used ‘MP’ to practice uniformity, consistency, and impartiality (Carrabine, 2000: 318). The euphemism re-represented monitored people in a way that was more palatable, sanitised, and helped EM Officers forget that they are, as put by Campbell (Monitoring Officer), ‘on a tag for a reason.’ While this term was intentionally not used in the company of monitored people, several interview participants who had been subject to EM expressed that they felt amassed or lumped into a category that was not of their choosing. For example, Matt was frustrated by the way he felt ‘bracketed’ by The Company:

Matt: [...] And obviously, they probably have people trying all sorts of things but when you’re genuinely not trying [*laughs*], you know, you just feel like everyone’s lumped into this one bracket of, you know, we seen it before, we heard it before. You know? Everyone’s treated like, I suppose, like they do in other places, they’re all treated the same. You know? And it’s.... it’s quite frustrating, you know?

Matt’s perspective resonates with Deleuze’s (1992: 5) concept of the ‘dividual’ which is a re-casting of the individual into a quantified unit/mass of material to be controlled. Whereas people subject to EM were three-dimensional, complex subjects, ‘MPs’ were flattened objects capable of being categorised, managed, and homogenised. I argue it was not only a technique of regulation and control, but also a way of easily incorporating and entangling people into penal surveillance, where someone like Matt simply became just another ‘MP’ to watch.

Many other actors were enlisted in the activities and associations of penal EM, in addition to the monitors and the monitored. This included more obvious examples such as Police, Sheriffs, and Prison Service. However, it also included non-criminal justice actors such as the Health Service and co-residents of those being monitored. For example, Health Service staff were somewhat ‘deputised’ to check on people being electronically monitored (if they were staying overnight in hospital) and report back to The Company.

Cyrus: The other memory I’ve got is that I have a problem with acid reflux, it was quite severe and was giving me a lot of pain, so I went to hospital. It was bothering me a couple days so I phoned up the [Health Service] and I says ‘I got pains in ma chest’ and as soon as you say that to anybody on the [Health Service] line they send an ambulance oot and I says it’s got nothing to do with my heart but they says, ‘no, no, no, we need to check.’ So the ambulance came and they took me to the hospital and I spent the night there. I did phone [The Company] and I said ‘blah, blah, blah’. And in the middle of the night a nurse still came to see and check that I had the bracelet on my ankle. That was really embarrassing.

Ryan: Really?

Cyrus: Yeah that was very, very embarrassing. Cause the rest of the day, the next day, I was quite eager to get home and I just think, ‘I wonder what she thinks I’ve done?’ Course, I never said anything like why I had it on. I just kept it to my mind. *‘I wonder what she thinks I’ve done?’* You know what I mean?

For Cyrus, surveillance followed him to the hospital. The network adapted to his movements by creating new nodes, or connections, to continue monitoring his location. Realising that the nurse looking after his health had become part of the surveillance apparatus made him feel embarrassed and alienated from the medical environment. Co-residents were another significant group of actors entangled in the penal surveillance network. Previous research has indicated that those living with monitored people during the duration of their order experience many of the same pains and inconveniences as monitored people, in addition to feelings of guilt, obligation, and extra responsibility (Vanhaelemeesch and Vander Beken, 2014). During a night shift with Monitoring Officer Chris, it became apparent how strong of a feeling that obligation, extra responsibility and worry could be. In the excerpt below, Chris had just answered an incoming call from someone’s box (which has a phone attached to it). It was the elderly aunt of whoever was tagged to that box. She knew it was several minutes past her nephew’s curfew and was very worried he was going to get in trouble for not coming home yet. She told Chris he had been drinking a little earlier and that her nephew probably just lost track of time. Chris told this woman her nephew would be penalised for the time and should call back once he gets in. After hanging up:

He goes to the person’s Event History Report, where it does in fact say that he is late for curfew and writes a note about it but declares that it was an ‘other person providing info.’ He tells me that this sort of thing happens often, and while it can be nuisance when other people are using the box to phone The Company, that their calls are a form of evidence. I’m thinking... evidence for what? It’s evidence, using the example above, that the aunt just admitted the nephew definitely wasn’t home for curfew. If the nephew later tries to contest the absence, The Company can use the aunt’s word against him. I wonder if that aunt realises her call is being used to essentially ‘grass’ on the nephew she was trying to help?

(22/2/2019 field diary excerpt)

This example shows the ways in which The Company benefitted from the extension and thread-like quality of the penal surveillance network. Only monitored people were supposed to operate the phone and directly contact The Company. Yet, Chris’ use of the aunt’s call and information was a process of ‘translation’ in which the system was made

more stable through transforming the ‘nuisance’ call into ancillary evidence (Latour, 1987).

To better understand how The Company associated with other public sector agencies such as the Police, Prison, and Sheriffs, I will return to the topic of private sector service provision. There are long-standing ethical and political arguments, across the Global North, against private sector involvement in the criminal justice system. As pointed out by Hucklesby (2018), challenges of cooperation between differently ‘sectored’ actors are exacerbated by the impenetrable structures, silos, and cultures of criminal justice organisations. Immersed in the inner workings of The Company, it was evident through telecommunications alone that they were relationally estranged from other criminal justice agencies. EM Officers were constantly attempting to phone holding cells, courts, social work, and hospitals to locate monitored people. There was no indication of multi-agency working, no volunteered calls from the Police to let The Company know they had arrested someone wearing an ankle monitor, and long waiting times as Monitoring Officers attempted to call various hospitals to see if so-and-so had checked in or out yet? In fact, some staff shared that there were nurses who refused to cooperate with The Company altogether out of principle. This often mattered little to The Company, since the onus of proving a monitored person was hospitalised then fell on the monitored person to produce evidence of their stay or convince the nurse to confirm it for them.

These findings demonstrate that the penal surveillance network certainly extended out to entangle others, but the enactment of monitoring was often begrudgingly resisted, and relations were built on mistrust. Braithwaite (1998, cited in Hucklesby, 2018) distinguishes between ‘thick’ and ‘thin’ forms of trust. ‘Thick’ trust is grounded in shared identity, strong relationships, and friendly relations whereas ‘thin’ trust is based on obligation and legal/contractual requirement (*ibid.*). It is evident that The Company had thin trust with the other people and organisations brought into the penal surveillance network, particularly those unwillingly entangled. Often relying on telecommunications and system software to mediate relations, The Company simultaneously stayed connected yet at a distance from other associated agencies and people; and those agencies and people also often tried to keep a distance from them.

2. Connections and manufactured narratives

The Company operated largely, but not completely, at a distance relative to those they were monitoring. This was made possible by the connection between the box and tag devices installed in the homes and on the bodies of monitored people for surveillance, which is one of the major features of EM that distinguishes it from other, more human-human forms of penal supervision. Beyens and Roosen (2020: 899) have argued that as a result of the technological automation associated with EM, ‘individuals become alarms.’ While this evocatively captures certain dimensions of EM governance, it is also important to not draw too many overarching conclusions about full automation and technological determinism in related to the work of monitoring. Nellis (2010) and McNeill (2017) have both argued that most penal options rely on a combination of both automation and human discretion practices, which helps to maintain a broader perspective on the distinctness of EM.

The following section will contest the notion of full ‘automation’ to better understand how different associations between people, technology, and spaces informed actions taken by The Company and monitored people alike. Brown (2006) uses the term ‘technosocial’ to describe the hybridity between the digital and the social dimensions of aspects of power, practices, and subjectivities. Taking this notion forward, this section will first explore the networked governance of EM and how penal surveillance operated both up close and from a distance. Linked to this, the next sub-section will explore how The Company restructured spaces and places to better suit the optics of digital surveillance and make spaces measurable. Lastly, ‘system narratives’ will be analysed to better understand how digital surveillance systems often went beyond describing realities and behaviours and instead manufacture versions of realities that often became difficult to change or refute later on.

2.1 Authority at a distance

The peak times or rush hours were cacophonies of sound and action. The phones began ringing with incoming calls just before 7pm, as the more ‘proactive’ monitored people tried to phone The Company to warn they were stuck in traffic and would be late. Monitoring Officers were settling into their stations with fresh cups of tea and obsessively manually refreshing the live feed as it edged closer to 7pm. On the dot, the Officers started shouting names out loud as events popped up in the queue, claiming them as theirs. Once a name was shouted and it was confirmed no one else was handling that event, the Monitoring Officer selected it which brought them to the monitored person’s ‘homepage.’

The National Monitoring Centre represented a ‘centre of calculation,’ where disciplinary powers and social control were exercised from a distance (Munro, 2009: 133). The calculators, in that sense, are the Monitoring Officers. The role of a Monitoring Officer is primarily office-based. Their work is akin to that of a CCTV operator: watch and record. During their so-called rush hour(s) at the onset of evening curfews, six of them sit at one large table together, covering their own station but working as a team to monitor all regions of Scotland. The rush lasts from 7pm until about 9:30pm, when events and alerts dwindle down and two Monitoring Officers shift to another table to monitor Northern Ireland’s rush hour which begins at 10pm. Each station has two computer monitors which run the system software and a busy shared phone line. As remotely located boxes transmit surveillance data to the National Monitoring Centre, they generate ‘events’ which appear on a live queue for Monitoring Officers to act upon. Events include: Return Home Late; Left Home During Curfew; PID [tag] Tamper; Change in Power Source, and more.

Looking up a monitored person in The Company’s database, it automatically loads on the General tab, which has information about their order, the sentencing authority, residential address, and other details. The Schedule tab is formatted like a calendar, with times blocked out for curfew hours. This is useful to Monitoring Officers when people need clarification about changing, suspending, or concurrent curfew times. The Accumulated Time Violation (ATV) tab is the bank of accumulated time violations (hours, minutes, seconds), which look like a standard spreadsheet, with individual absences (date and time), the duration of the absence, and the type of confirmation. At the bottom of the ATV is a running total time of all time violations a person has. The Special Instructions tab is infrequently visited but used by Monitoring Officers as one of the ways they indirectly communicate a monitored person’s ‘riskiness’ or ‘vulnerability’ with one another, since the term ‘risk’ is not formally used by The Company. It is not that actuarial calculations are unimportant to The Company, but rather that the term ‘risk’ is superficially replaced by more subtle indicators, language, and conditions. When someone requires Special Instructions (another tab on a monitored person’s homepage), it typically insinuates that the monitored person is seen as ‘riskier’ or more vulnerable than others but this could mean many different things: if they were deemed to have a violent history; were overdue a visit; had special conditions in the event of a visit; if they were underage; if they did not speak English; or if they had a known disability. A Special Instruction may include that two Field Officers are needed for a home visit rather than just one (i.e. back-up); an immediate call to the Police or Social Work is necessary if this person is late; or accessibility or PPE notes. Colour also communicates riskiness, as red-coloured events

typically indicate that someone has Special Instructions and red events are more urgent than the standard green events or low-priority grey events at the bottom of the live screen.

Despite being desk-based, Monitoring Officers were connected with the system software, the telecommunication system, monitored people, co-residents of monitored people, Field Officers, and many other people and devices across the network. Most contact was limited to phone calls. As busy as they were as a distant centre of calculation, the work of a Monitoring Officer was often frustrating, highly regulated, filled with tail-chasing formalities, and ultimately very boring. Smith (2004: 385) has discussed how CCTV operators developed specific socio-cultural constructions that they used to decipher 'legitimate' and 'deviant' behaviours of those they watched from a distance, and mainly from a place of boredom. Monitoring Officers similarly took out their frustrations at constantly unanswered calls by assuming the monitored people they were trying to call were 'taking the piss,' 'drunk,' 'at it,' or even hovering by the phone but intentionally not answering it. Relying on digital communications to contact people limited the surveillant gaze, but Monitoring Officers constructed just as much meaning from the silence as from the responses.

Another important feature of networked surveillance at a distance was how power rendered itself conveniently invisible, and then importantly, visible again when required (Munro, 2009). The notion that power operates through invisible forms of domination is not new to criminology, as concepts of 'soft power' (Crewe, 2011) and 'active subjectivity' (Foucault, 1982) have been influential in understanding punishment experiences, emphasising penal forms of governmentality -- whether power accomplishes this through system-level techniques or transfers it to technologies of the self (Rose, 1999). EM was in many ways an invisible form of power as well, particularly because of its ability to conduct surveillance at a distance. However, as a highly mobile, fibrous actor-network EM was distinct; at one moment invisible as some computer-based office located on the other side of town or the country and an officer who could only reach you by phone. In the next moment, it was a very visible Field Officer banging on your door late at night demanding access to your house.

It was nearly 6:15pm by the time we got to H's house. Pete never explained on the phone to H why he was coming by, and at the time H didn't ask, but it was the first thing he asked when he answered the door. He wanted to know why The Company didn't ask him the day before or something if it would be okay to come by? Pete told him that EM (he never referred to himself as The

Company, just electronic monitoring) didn't have to ask and if he was compliant with his curfew, then he ought to be home anyways.

(27/11/2018 field diary excerpt)

The ability to coalesce at different sites, act from a distance, and render itself immediately visible or invisible was part of The Company's unassuming power. People were watched from afar, but penal surveillance was nevertheless a constant presence in people's lives while subject to EM. The capillary extension of penal surveillance via the tag on the body and box in the house blurred distinctions between the sovereignty of someone's home space and the 'fibrous' governance of EM (Latour, 1996: 370).

2.2 (Out of) place

Within the context of fieldwork, the premise of an EM sanction primarily involved spatially confining a person to their personal residence during curfew hours. The bounded space of confinement was, theoretically, the entirety of a person's indoor residence. However, The Company had to generate a different space superimposed over the house in order to remotely measure and quantify someone's embodied presence or absence. This section will explore how such spaces were represented, ordered, and related to through 'associations' of penal surveillance power (Latour, 1986).

This space was referred to as the 'range' and was co-constructed as part of an induction ritual (or if the range ever needed to be reset) involving the present Field Officer, the box, the tag, and the soon-to-be-monitored person. The box initiated the ritual by entering 'range-setting' mode and the Field Officer instructed the soon-to-be-monitored person to move around the house in a way that would capture its approximate size and perimeter. 'A foot in every corner' was the typical instruction, although Field Officers used slightly different techniques for capturing the range based on their experiences, knowledge of surveillance technology, and rapport with the monitored person. The range was generated as a result of different people and things coming together, a technosocial ritual, and the individualised ways in which these different actors related to one another during that ritual had impacts on both the broader enactment of monitoring and the experience of being monitored (Brown, 2006; Munro, 2009). The following field diary excerpt is from the first range-setting ritual I observed:

Jack got out a roll-out canvas bag and asked 'A' if there were any issues with his left foot/leg? There weren't. He rolled up his jeans and Jack measured his

ankle with tape. The roll-out bag held ankle straps of different lengths. The grey circular bit of the tag was clipped into a curved, red device about the size of my fist. The red device let out a short musical tune. Then the strap was clipped in on one end of the red device, wrapped around A's ankle, and clipped in on the other end. The big red device was still attached and seemed to act like a fastener. Jack brought out another small black device, about the size of an old Blackberry phone, and held it side by side with the red fastener on A's ankle. Something synced between the two and the box made a loud beeping noise. Then the Blackberry-shaped device was held near the box on the shelf and the beeping became continuous, like a fire alarm. Jack unclipped the bulky red fastener to reveal the tag beneath and told A to touch all four corners of every room in the house. Jack and I both followed him throughout the rooms upstairs and then downstairs. He sometimes had to squeeze behind furniture if Jack encouraged him to or turn lights on and off, but he stretched and shoved his ankle into every crevice and corner of his sister's house. [...] We went back upstairs to the bathroom. I must have missed Jack ask A's sister to run the bath, but now it was filled up a couple inches. Jack told A to submerge his ankle in the water so that the entire tag was underwater to test its waterproofness. The bath wasn't filled high enough, so Jack suggested A tilt his ankle on its side so at least the grey circular bit was submerged. Jack counted down from ten out loud, told A to dry off, and then went in the bedroom and finally turned the loud beeping off. It wasn't until the noise stopped that you realise how loud it really was.

(26/10/2018 field diary excerpt)

Whereas the walls of a house are typically visible and definitive, the boundaries of a range are invisible. Ranges are marked by sound rather than sight; the box emits a high volume, piercing 'beep' sound at one-second intervals during range-setting mode which demarcates the spatial boundaries of what is 'in' and 'out.' The noise urges the ritual forward since it only stops when the monitored person fully walks the perimeter of their residence, demonstrating how technology "works us' as much as we work it' (Munro, 2009: 126). The noise is shocking, akin to a fire or car alarm, and it reverberates throughout the house or flat for up to 15 minutes, depending upon the speed of the induction ritual and size of the residence needing covered. It often elicits upset or surprised responses from monitored people and their co-residents, stirs neighbours, and frightens pets. This is particularly exacerbated because of environmental and temporal contexts, since induction visits must be completed roughly between 7pm – 12am.

The three of us made our way back down the stairs while the loud beeping continued. B's mom told him to walk around the back garden a little bit so he'd have a place to smoke at night outside, but Jack said no. B needed special permission from the court for backyard access. B's mom wasn't pleased with hearing that. I noticed that as part of her Halloween costume [it being the Friday night before Halloween], she suddenly acquired a small moustache from her nose to her top lip, which was formed in a scowl now. It was more obvious

now that it was a Laurel and Hardy ensemble. She was also clearly pissed off about the loud beeping and as she and her friends left, she loudly asked if it would do that all the time at night? Jack pretended he didn't hear her, and she was out the door now anyways. All of the young people were still in the kitchen. They were drinking and a couple of them were smirking but silent when B touched all four corners in the kitchen.

(26/10/2018 field diary excerpt)

Despite the comedic old-fashioned costume, B's mom was angry and frustrated by the commotion in her house that she had no control over. As a boundary marked by sound, the range carried a 'symbolic load' (Douglas, 1966: 4). It was noise pollution in the sense of loudness, but more importantly, in the sense that it represented a pollution of the sanctity and sovereignty of so-called 'private' space. If noise is a relative category of sound, then the range was disruptive noise, or 'sound out of place' (Novak 2015; Pickering and Rice, 2017). Herrity (2019) has explored the social and political contexts of sound in prison, drawing on 'dirt' and 'purity' to elucidate how sound not only intrudes and blurs public and private spheres, but how we can understand its association to institutional power as well. For monitored people and those they lived with, the noise of the range was unwelcome, alienating, and transformed their relationships to 'home' space as it also transformed the boundaries of that space. This finding demonstrates that these associations go beyond the prison and can be observed in systems or networks of power as fluid and complex as EM.

The power of association between sound, space, and control can perhaps be better understood in the 'technical context' of the range noise and an explanation of its purpose (Novak, 2015). While EM Officers did not wear branded clothing, drive cars, or carry bags while in the community, the sound was a noisy slip in image management, offering a 'backstage' snippet of penal surveillance (Goffman, 1959). However, I learned over the course of fieldwork that that the sound was not automatic or prefixed, but alive, responsive, and communicative. The piercing noise communicated connectivity and reception and skipped an interval in the rhythm if a specific space was not successfully mapped as belonging to the range. In contrast to unwanted noise, Novak (2015) identifies 'signals' which are desired sounds that are part of the system. Whereas the range was 'dirty' noise for the monitored, it was a clean signal or message for the monitors. It became a technique for maintaining boundaries, not just of material space but of control as well. The ritual of range-setting was an active process of maintaining underlying binaries such as dirty/clean and insider/outsider which rendered a monitored person an outsider within

their own home. In this sense, and as will be explored in the next two chapters, material and semiotic dirt is intimately linked with processes of othering and belonging (Pickering and Wiseman, 2019).

Although home and range spaces overlapped one another, they were not mutually inclusive. For a variety of reasons (poor reception, tower signals, inaccessibility, poorly set range, etc.) ‘blind spots’ between the two spaces could form, which made it possible to be home, but outside of the range and vice versa. This meant that some monitored people could not access parts of their homes during curfew, and that the place they were restricted to had restrictions within it. For example, when I met J during a ride-along with a Field Officer in November 2018, he was not able to access his kitchen from 7pm – 7am. The box would skip several intervals of sound during range-setting mode anytime the Field Officer attempted to include it in the range during J’s induction. This interference in signal, a dirty ‘white noise’ or blind spot, excluded J from parts of his home (Pickering and Rice, 2017). J told me the Field Officer tried 3-4 tags during that initial induction to attempt to better capture the range but to no avail and he had to accept in writing that the kitchen space was off-limits during curfew hours for the duration of his order. Several interview participants also spoke about ‘blind spots’ directly or indirectly:

Rob: [...] It was just this big box. The first guy who installed it couldnae quite manage to get me connection doon to my front door. We stay in a top flat so you go along the hall down the stairs to my front door. Every time he tried to calibrate it, it wisnae picking up the far end of the house and the door. So it meant even though I was on the tag and in the house, if somebody chapped at my door, I could not answer it. Right? There was one time I nearly took the bins out, which is right out in the front garden. That would've been a big no-no.

Blind spots were sometimes already known, such as the ones discussed by J and Rob, but they were more often discovered at a later point. The process of discovery was relationally and technically complex, due to the various types of blind spots that could occur and the impossibility of changing certain issues such house layout. In the following excerpt, Liam shares his experience of blind spots:

Liam: She never breached me or anything, just still put the tag on. Eh, told me to walk aboot the whole entire hoose to get my tag used to like, everywhere, cause there could be a few blind spots on the tag.

Ryan: Were there any blind spots for you?

Liam: There was quite a few. There was... see if it's past the time that it is meant to and you have like a wardrobe or unit you can stand on. If you stand on it, up high, and they've no marked it as the ground and the hing goes off.

Ryan: Oh so if you were like.... Going to step on a ladder or something?

Liam: Aye. Up higher than anything you got told to walk about or to stand on. If you was any higher than that it got – basically... it set a wee alarm off. I remember my cousin ended up having the tag and there's one blind spot in his hoose and eh, his house was a awkward layout and basically at one point it said that he was outside but it was just because of the layout.

If someone entered or passed through such a space without knowing, the tag transmitted to the box and then to the Monitoring Centre that this person was outside of the range. The system software generated a narrative for the benefit of Monitoring Officers that the 'MP left home during curfew,' and this message was then followed up with a phone call based on the assumption that the signal and system narrative was accurate. Blind spots were indicative of a functioning, but incomplete and imperfect system.

In the Monitoring Centre, blind spots were a visually produced irritation to the Monitoring Officers because, as they watched the live queues on their screens, these flagged up as repetitive, short absences and returns, each as their own 'event.' This clogged up the monitoring feeds. Perhaps because of the placement of the box, the signal strength, or actions of the monitored person, Monitoring Officers typically struggled to get hold of people during these 'controversies' which typically dragged out the problem for hours at a time (Latour, 1996).

There is another case that keeps bouncing around between different Monitoring Officers. This person apparently left the house 3 times tonight already. The recorded absences are short: 2 seconds, 3 seconds, 3 seconds. An Officer will shout out the name and attempt to call him to find out what is going on, but he's not answering the call. A couple minutes later, another Officer will attempt to call him because every time he leaves, even for just 3 seconds, it pops up on the queue as a new absence [...] the Monitoring Centre is still dealing with this guy with the frequent and short absences. No one can get hold of him. The absences now are getting up to 30 seconds, 40 seconds, 25 seconds, etc. Everyone has taken a shot at trying to call his box, including Chris. No answer. 'He's doing a hokey cokey' they say.

(21/2/2019 field diary excerpt)

The ‘hokey cokey’ was given this playful name by Chris and the others based on how their system software presented it to them. Foot in, foot out, foot in, foot out. It was constructed through hybrid processes of human and machine meaning-making. I also argue that it represented ‘visual noise,’ a distracting graphic that dirtied the screens and indicated there was an unstable connection in the network (Novak, 2015). However, these situations also had distressing repercussions for the people being monitored. When I was out with Pete on a night shift, we visited M who described to us how he had been woken up in the middle of the night by the ringing of the box in the kitchen, accused of being absent for curfew even though he was in his bed sleeping. He went into such a rage at being falsely accused by the person on the other end of the phone that he caused damage to his parents’ house and the parents had to phone the police on M, further enmeshing him in the circulation of the widening criminal justice system.

2.3 The performativity of system narratives

This sub-section will explore how the social, embodied interactions of people cannot be separated from the digital, material technologies that mediate and reconfigure the enactment and experiences of penal surveillance (Brown, 2005; Lash, 2001). EM generated new time-space relations, where traditional notions of distance, space, embodiment, and presence no longer sufficiently conveyed the possibilities of EM relations and connectivity (Latour, 1996). The Company did not just require digital technologies as mere, neutral ‘tools,’ but significantly relied upon technology to describe and, and as I will argue, materialise narratives of reality; the ways in which EM Officers made sense of the world was through hybrid interfaces of people and machines (Haraway, 1991; Lash, 2002).

Robert Werth (2019) has argued that risk assessment technologies, a different but nevertheless interconnected penal technology, do not just describe realities about people such as ‘riskiness,’ but enact and performatively (re)constitute that reality through discourse. The language used in the enactment of risk assessing operates on a self-fulfilling logic that deems all subjects assessed as inherently risky and which then structures relations based on this seemingly neutral or objective truth (*ibid.*). I argue that similar discursive and material effects were experienced by those subject to EM.

The phrase ‘confirmed by default’ represented one of the ways in which penal surveillance technology manufactured narratives of reality. When a monitored person had been

recorded by the system software as ‘Returned Home Late’ and did not immediately answer the phone call from one of the Monitoring Officers to explain themselves, the standard practice was for Officers to enter ‘Confirmed by default’ under ‘Type of Confirmation’ when they transferred the absence to the bank of accumulated time violations. Confirmed by default status meant the time-violation was accepted as reality until the person called back to either confirm or contest the absence. The phrase itself was intended as a placeholder until the person was eventually reached, but ‘confirmed by default’ became significant and shaped the ways that EM Officers then acted. This is where the language went beyond description and instead, became a performative narrative (Werth, 2019).

Guilt was assumed as the default response and until the monitored person called back, the violation was self-confirmed. Yet, as established in the previous sections, these narratives of absence could be fictitious. While some may involve a person intentionally skipping out on curfew, it could equally be someone going into their kitchen, climbing a ladder, taking a bath, or anything or anywhere else that was deemed unmonitorable or inconvenient to monitor. Nevertheless, once the system software manufactured a narrative that the monitored person was not home, or within range, Monitoring Officers reconstituted that narrative by entering the confirmation in the system as self-evident. The material effects of this were punitive, as not only was the violation pre-emptively confirmed, but the time (violation minutes) was automatically added into the Accumulated Time Violation (ATV) bank, making it even more difficult to later undo these ‘micro-penalties’ (Foucault, 1977: 178). If or when the person was reached and they confirmed the time violation, the ‘Type of Confirmation’ was changed from ‘confirmed by default’ to ‘confirmed by MP.’ The time penalties remained. If the person contested the time violation, ‘confirmed by default’ remained the status pending an investigation by a Field Officer, where a monitored person would then have to convince the visitor that the system narrative, albeit persuasive, had fabricated a false narrative.

Denied Absence Investigation visits were subsequently carried out by Field Officers in order to gather more information and possibly diagnose a technical issue that would reveal a fault in the network. The latter was the only tangible way for a monitored person or Field Officer to subvert the system narrative of guilt. On one hand, Field Officers such as Dave and Louise stood out as particularly reliant solely on technical diagnostic devices to conduct their investigations and did not weigh the perspective of the monitored person who was contesting the absence. If the diagnostic tool did not identify a connectivity or battery problem, the system narrative took precedence and the person was narratively

constructed as absent by the penal surveillance network, regardless of their version of the events. On the other hand, Pete exercised a lot of discretion which meant the system narrative could be changed or subverted. Pete often took the monitored person's perspective into account to help ascertain what had happened, but nonetheless, he too often fell back on the system narrative anyway, even if he personally felt the person was being 'truthful.' In the example below, Pete admitted he believed the equipment had gotten waterlogged or disconnected because of J's baths but nevertheless felt the gravitational pull of how the frequency of the absences appeared in the system software.

In the car, Pete asked me whether or not I believed J about the bath? I told him I didn't see any reason to not believe him. He admitted there wasn't a good reason to doubt him, but that he finds the time of his baths suspicious and the frequency of these types of violations. Pete also acknowledged that deep bathtubs always cause issues. All of this made me wonder why he didn't factor that into the decision he made about J, but I don't say anything. He puts the GPS back on so we can get to the next house.

(27/11/2018 field diary excerpt)

Despite Pete's personal judgement that J had not left his home the night before and that the equipment was at fault, he conformed to the system narrative and confirmed the absences which would add time to J's accumulated time violation (ATV), perhaps because it was easier than supporting J's contestation of the absence and to protect himself professionally (Werth, 2019). The times of the absences appeared 'suspicious' in the queue at the National Monitoring Centre, which effected how he concluded the investigation. There was a bias towards the system narrative, which manufactured persuasive and powerful versions of reality that were difficult to undo, casting and constituting certain monitored people as noncompliant.

3. (Mal)functioning bodies, (mal)functioning compliance

Thus far, this chapter has explored the assemblage of people, places, objects, and actions that make up the penal surveillance network and how the distinct nature of EM connectivity and relations therein relied on system narratives to manufacture versions of reality to ease the practice of governing from afar. This last section adds to this by discussing how the flow of information across the penal surveillance network reconfigured and represented the notion of compliance. Linked to this, of course, is how bodily information became digitised and mobilised for scrutiny by digital systems. The first section will briefly explore the multiplicities of compliance and how EM complicated the

quantifying process of what it meant to be compliant or non-compliant. Next, will be a discussion of how information flowed throughout the penal surveillance network and how this impacted its bodily representation and materialisation in different times and spaces. The last section argues that the seemingly straightforward rules of what to do versus what not to do while on a tag were intricately linked (and limited) to the optics of digital technology and narratives generated by the system software. In sum, these findings deconstruct the binary conceptualisation of compliance and instead reveals a messier system of constructing and quantifying penal progress.

3.1 Representations of compliance

8:40pm – Campbell's next event is a return home late alert. He calls the person, who explains they were stuck in traffic. The 35 minutes gets added to the ATV, 'confirmed by MP.' Campbell shows me that this man already had 10 individual ATV entries. They add up to 1 hour and 56 minutes. Even though the total time isn't significant, the fact that there are 10 individual time violations might trigger a breach. There are so many different ways to get a 'breach.' It's not clear cut, nor is it uniform. It can be tallied up, a calculated sum, one significant instance, or just be a coincidence of which Sheriff sentenced you.

(13/11/2019 field diary excerpt)

Along with 'risk,' the term 'compliance' was strikingly absent from the administrative processes and activities of The Company, but again, only superficially. Time violations and breaches were 'inscriptions' used to refer to more explicitly measured behaviour (Munro, 2009). It was not clear to monitored people whether or not they were 'getting breached' for particular time-violations and, because of the division of labour within The Company, Monitoring Officers often refused to comment on breaches while speaking to people over the phone. Furthermore, breach thresholds for accumulated time violations varied from person to person and court to court, with some people more closely connected to the network or under a stricter surveillant gaze than others (Latour, 1996). In addition to time violations and breaches, The Company also had strange ways for accounting for 'good' behaviour. The Company kept documentation on incoming versus outgoing calls, all of which were logged into the database. This is related to the lateral surveillance of staff, as calls from monitored people and by EM Officers were both recorded. Outgoing calls were far more common – and logging one as outgoing insinuated that The Company had to chase the person by phone. If a monitored person was proactive enough to call The Company before they committed a time violation (i.e. caught in traffic, late home), that incoming call to the Monitoring Centre was logged specifically as incoming

and insinuated that that person was docile and self-responsible. These were looked upon so favourably by The Company that any instances of them were included by CRWOs in breach reports and completion reports, like a character reference, separating the seemingly docile subjects from the ‘malfunctioning’ ones (Paterson, 2007).

3.2 Bodies in and through mobile data

According to Lyon (2001: 15), ‘bodies disappear when we do things at a distance.’ To clarify, traditional embodiment disappears but new ways of representing and framing bodies emerge. The pervasiveness of global ICT systems (such as The Company’s system software), widespread surveillance, and digital networks stress the far-removed and remote ways bodies can disappear and yet reappear in new configurations (*ibid.*). Face-to-face contact and being in the same space and time as another person has not ceased as a result of the modern age, but it is also no longer the only way to be present as bodies are mediated and constituted through technosocial networks and arrangements (Burrows, 2009). In fact, the term ‘perpetual contact’ was developed by Katz and Aakhus (2002) through a series of studies which traced the co-extension of people and things throughout networks as mediated by mobile-phone usage. This indicates that non-embodied representations and entities are highly mobile.

The ways in which bodies were represented in penal surveillance data was dependent on how information about people flowed through the surveillance network. Presence-monitoring was facilitated by digital technology (the tag and box) that transmitted information to the Monitoring Centre and throughout the surveillance network. Latour (2005) refers to this as a technique of ‘abstraction,’ as embodied representations and actions become digitised. As different people, devices, and places are connected and assemble across the network, these abstractions are then translated into what are meant to be meaningful and actionable events for EM Officers to work with (Latour, 2005; Munro, 2009). The inscriptions of EM include many of the empirical findings already covered: time violations, system narratives, and unanswered calls. These inscriptions were easily shared throughout The Company, stored in the database, and they performatively affected actions elsewhere.

The question then becomes, what happens to the body in this process of abstraction? Subject areas such as post-feminist studies, social control studies, surveillance studies, and science and technology studies have sought to address digitised, or hybrid, bodies with

concepts such as ‘dividual’ (Deleuze, 1992), and ‘cyborg’ (Haraway, 1991) amongst others. Perhaps most relevant to the ways in which bodies are represented in this network is Haggerty and Ericson’s (2000: 606) ‘data double’ which focuses on the process of how the ‘surveillant assemblage’ transforms the human body into abstracted ‘data doubles’ which are subject to calculation, scrutiny, and intervention. Taking this idea further, abstraction is not just a representational process, but a way of reconfiguring subjectification. When people become ‘MPs’ there is an awareness of the need to perform compliance and that this performance is not assessed in-person. This creates ambiguity around how someone can anticipate the way they are received but it also reveals that the performance can be superficial and potentially less demanding. That being said, navigating this gap between corporeal and digitised embodiment and subjectification can be confusing or even harmful. This kind of self-regulation, if it can even be called that, only works if EM is accurate and it has already been demonstrated that this is not the case.

Crewe (2011) has similarly identified the obligation people in prison feel to put on a façade of compliance, in order to progress within the criminal justice system. The ‘penal avatar’ represents the necessary performance of compliance and of being ‘low risk’ that people put on to advance so they can be favourably characterised on file (Crewe, 2011: 516). In breaking this concept open, it is clear that monitored people have penal avatars as well. While monitored people avoided in-person scrutiny, this externalised and quantifiable version of themselves was constantly being transmitted, watched, and measured from afar and stored in a database. Whereas the original concept of the penal avatar is arguably founded on the idea that it is self-created and comes from a place of self-understanding (see Crewe, 2011), the EM digital avatar is imposed by the nature of the system of punishment. That is not to say that monitored people cannot similarly influence or shape this abstracted version of themselves, but the involvement of digital technology and the transmission of this data to a remotely-located site means that there are both human and non-human influences mediating this representational and subject positioning process.

3.3 Staying off the queue

Marshall: And yeah it’s... in a way, like, in a way, when you’re sentenced and you’re given tag, I’d say it’s better than sitting in prison.

Ryan: Yeah? How?

Marshall: I'd say on that part, yeah. It's not that I enjoy it, it's that I agree with it, yeah. It's way better than sitting in prison. Just comply with it, just comply with your tag, innit? That's what it's really all about.

Compliance rates are vital to the legitimacy of community sentences and to any claim that they 'work' (Robinson and McNeill, 2008). EM operated through a network of power aimed at regulating and surveilling those being monitored, and therefore, it is important to explore what The Company quantified in order to measure compliance. On the other hand, it is also important to consider what monitored people needed to do in order to demonstrate and perform compliance. Compliance is a term often used to convey both ideologically-driven and practically-driven behaviours. Perhaps the easiest to measure and record is what Bottoms (2001) has referred to as 'short-term' compliance with the order's or licence's conditions, which in terms of EM was simply adherence to curfew and the recording of micro-penalties (i.e. time violations) for the duration of the tag order. However, even that became a complex issue within the penal surveillance network because of The Company's reliance upon digital devices to remotely communicate and abstractly quantify that information. Penal surveillance data flowed from devices located on a person's body, to the box, to the 'centres of calculation' (i.e. National Monitoring Centre) and then circulated out to Field Officers or even the wider criminal justice system (Munro, 2009). That process of abstraction translated complex, embodied information about movement into binary data; reduced to whether someone was in or out. It has already been established through an analysis of the 'range' that this can be messier than just being in or out, however, there were hidden technical processes as well that arguably undid the seemingly clean simplicity of such a system.

I was wondering why the 5 minutes, or rather, 4:56 minutes weren't added to the accumulated time violation like it normally would be so I asked Jen about it. Jen tells me that the system actually has a grace period, so anything under that time won't get added to the ATV. Even though the person won't be time penalised, Monitoring Officers still call them and pretend they will be penalised for it. Jen says, 'We obviously can't tell them that or they'll just take the mick.'

(18/4/2019 field diary excerpt)

Time violations are time-stamped, important units of measurement for determining someone's compliance to a tag order. Yet, they are materially constructed truths dependent on a number of factors such as the internal clock-time of the box unit and Monitoring Centre, the quality of connectivity between various nodes of the penal surveillance network, and, as discovered through my time with Jen, the technical forgivingness of the

system software. The automatic grace period indicates that the traditional criminological understanding of short-term compliance is not an entirely accurate descriptor for this system. Furthermore, Monitoring Officers complicated the notion of (non)compliance by going through the motions of penalising people for these type of time violations and calling them to get more information and confirmation about the lateness. This evidences that the grace period was more of a result of technological design than human compassion; forgiveness was manufactured. However, this raises broader questions about what compliance to EM involved, since it was not purely about adherence to curfew.

Theories of compliance extend beyond ‘short-term’ adherence to conditions, such as theories of ‘long-term’ or ‘substantive’ compliance (Robinson and McNeill, 2008). For example, longer-term compliance is concerned with adherence to the law as opposed to just one’s sentence conditions (i.e. desistance from crime) (*ibid.*). However, outside of these more quantifiable forms of compliance, there is also ‘substantive’ compliance which is more concerned with the ‘spirit’ of the order (e.g. its rehabilitative intent) (Robinson and McNeill, 2008). In the following excerpt, Andrew reflects on these differences and expresses that EM does not meet the criteria for either:

Ryan: Do you think there’s anything rehabilitative the tag offers?

Andrew: Nah. It doesn’t rehabilitate. It’s just like prison. You can’t lock up my addiction, you can’t lock up my criminality. It didn’t make me dae anything about changing my life up a wee bit. I’m no gonna change, I’m just gonnae sit there til you take the reins back off and then I’m gonnae dae whatever I’m gonnae dae then. And that’s been my experience through pretty much all the systems. Cause even when you’re in – I’ve had a couple of good workers through my time who have really tried with me with courses, ‘take this or that,’ and all I had to do was sort of comply with it. And I pass and I don’t go to prison. Courses upon courses and as long as my bum’s in the seat. I don’t have to really look at myself. I don’t have to really work. I don’t even have to speak. I just need to put my bum in the seat and I pass. I don’t go to prison. There’s nae, aye, there’s nae true insight.

Andrew dismissed the notion that EM was substantive or had long-term effects on his behaviour. Despite the fact that he wanted to do something about his substance use, that he wanted to undergo some sort of personal transformation, he had no support to make those changes and EM Officers had no way of working with Andrew on that basis. He compared it to his time in prison and enrolment in courses where he just had to be present and have his ‘bum in the seat.’ Perhaps for the context of EM, a similar sentiment might be staying ‘off the queue’ or off the live task feed at the National Monitoring Centre. Compliance

while being monitored was simply about avoiding having an event generated and queued up in the system software, rather than specifically about time violations. The moment one made their way on to the queue, they were not only at risk of accruing a time violation, but also of being characterised by someone like Jen as ‘tak[ing] the mick.’

Staying ‘off the queue’ indicates a distinct technological version of compliance that has less to do with human action and more to do with how the EM system recorded and externally presented information to Monitoring Officers. However, the issue with avoiding the queue was that monitored people had no indication of whether their actions generated events. This created a seemingly grey area of compliance, in which people admitted to leaving the house but did not get technologically penalised for it or vice versa.

He realised he accidentally stepped over the door threshold and was calling The Company to explain why. Even though this guy was admitting stepping ‘out’ of his house, he was still within the range. The system never picked it up so it wasn’t something he was getting penalised for. Campbell never mentioned this to him, but said it was good he called, though he should try not to do it again, to not worry about it. I’m thinking.... of course he doesn’t have to worry about it, he just admitted to something he’s not getting in trouble for it anyways. After the call ends, Campbell enters a note about the incoming call and logs it as a MP Providing Information.

(13/11/19 field diary excerpt)

This observation cemented the notion that compliance to a tag order was less human and more machine. Here was someone admitting to a representative of The Company that he violated the requirements of his order, and yet, it was not a violation or breach of compliance simply because the system software had never recognised or recorded it. Campbell had gone along with the person in assuming The Company knew about the violation and that he was penalised for it, but ultimately that information was translated into ancillary information rather than disciplinary information. In line with the similar processes observed in a study by Waldram (2012), monitored people’s self-understandings are filed as erroneous, ancillary, and even something to be manipulated with or over-written by Monitoring Officers. Their lives, transformations, movements, and narratives are re-formatted through an ‘electronic dossier’ into an object that they will never even get to see (Waldram, 2012: 141; Foucault, 1977). The input from those being monitored is treated as secondary information compared to the input from the system software, even when people made an effort to meaningfully engage with the regime punishing them.

This comes back to Mol's (1999, 2002) concept of 'multiplicity,' but alongside that, the additional concept of 'ontological politics.' These denote an approach to the social world based on an understanding that, for example, EM is not an object or a single practice, but a multitude of practices that are performed differently and by a number of actors (*ibid.*). In this sense, realities are enacted and thus, multiple. Several empirical examples of multiplicity have been discussed in this chapter, highlighting the gaps between a person's self-understanding of how they are represented in the system governing them and how the governing system represents them; how different material and digital spaces coexist and may or may not overlap one another; and the many versions of compliance which are performed differently by people, hardware, and system software. Although these different realities coexist, this analysis demonstrates that certain realities are made more durable whereas others are discredited, typically to the detriment of monitored people. This is then the 'ontological politics' of EM where what becomes 'real' is politically determined by those in positions of relative power (Mol, 1999). The digital infrastructure of EM reconstituted versions of reality that were interpreted as more reliable and quantifiable than that of 'untrustworthy' humans.

Conclusion

Electronic monitoring is a complex, networked system of punishment involving myriad people, places, technologies, practices, and as this chapter has demonstrated, multiplicities of realities (Law, 2008). The Company, as I observed it, was a heterogeneous organisation of diverse Officers and technologies, loosely held together by a lanyard around the neck and shared dependency on machines. Yet, it was exactly the 'fibrous' quality of penal surveillance that allowed it to adapt to different places and people and pervade other agencies and organisations that were roped into the enactment of monitoring (Latour, 1996: 370). EM operated simultaneously up-close through the devices left on people's bodies and their homes and, yet, also at a distance through remote surveillance practices. Sometimes it was the frantic refreshing of a computer screen in some distantly located office building, and other times it was a knock on the door in the middle of the night.

This chapter set out to untangle the networked governance of EM in order to better understand how digital technology and surveillance was used to punish people. More specifically, the findings from this chapter address the research question centred on identifying the ways in which different people and technologies in this system of penal surveillance come together and relate to one another. Spread out over time and space, The

Company relied on processes of abstraction and translated inscriptions to construct versions of realities that I argue circulate through the network as over-simplified and stretched-out ‘system narratives.’ Queues, colour-coding, ranges, grace periods, and ‘default’ confirmations were all different techniques and technologies used by The Company to efficiently organise, sort, and resolve the flurry of surveillance data that flowed up-stream to their centre of calculation. Yet, I found that these techniques and technologies did not just simplify some external notion of the ‘real’ EM but actively constituted and enacted it as a practice. Such narratives often went beyond just describing situations and instead, reconstituted versions of reality that were either more believable or at least more difficult to refute than those of monitored people. As differently situated people and technologies connected with one another, these connections had technosocial effects that were the product of both machine automation and human discretion (Brown, 2006). This theme will be further explored in the next chapter, as the subtle everyday experiences of both being monitored and doing monitoring were constant negotiations of the blurry boundaries between the embodied/digital and material/semiotic aspects of penal surveillance.

Chapter Six: The constraints and intimacies of penal surveillance in everyday life

Introduction

This chapter focuses on the everyday experiences of being monitored as well as the enactment of operational monitoring. The experiences of these different actors, seemingly opposed to one another, demonstrates that, far from being a sophisticated, cool, and clinical application of technology, EM is a messy, intimate form of punishment involving both the prevailing narratives of digital systems and the complex discretionary powers of EM Officers. The previous chapter explored and discussed relational and situated experiences within and throughout the penal surveillance network of EM in Scotland. It covered empirical findings and discussions around the networked governance of penal surveillance and how EM operated both up close and at a distance. As penal surveillance data flowed from one site, actor, or process to the next, it produced distinct ‘hybrid’ narratives and representations of bodies, places, and actions that significantly affected both the enactment of monitoring and the experience of being subject to EM (Brown, 2006).

Building upon Chapter 5, this chapter seeks to unseat the narrative of EM as the always-better alternative, as value-neutral, and as a seemingly ‘clean’ form of punishment. By digging deeper into the dynamics and relations of/between the watched and the watchers, we see the different ways in which EM is enacted through a complex network of people and technologies, each constrained by different pressures and problems. The first section discusses findings related to the everyday experiences and rhythms of being monitored, centred around the original concept of ‘constrained connectivity’ as a type of affective grip that took hold of people, subjecting them to temporal regimes, ordering, and synchronisation. This includes experiences of the unique temporal order of EM, perceptions of freedom, routine, and stillness. The second half of this chapter then explores the enactment of monitoring, analysing the discretionary powers of EM Officers at The Company which were not calculated exercises of domination via penal power but rather small, everyday decisions and judgements that cumulatively exerted power over monitored people. This section explores the role of EM Officers as an interface between the surveillance narratives generated by the system software and the people being monitored. Overall, this chapter undermines the pervasive narrative of EM as a purely neutral, automated, or clean form of ‘techno-managerialist’ punishment (Paterson, 2014). Rather,

EM Officers carried out emotionally-laden work, enacted monitoring differently, and had to make strong value-judgements about the people they monitored. The findings of this chapter raise concerns about the discretionary powers of the watchers, the underestimated grip of being subject to EM, and the extent to which monitored people are being watched but not properly seen.

1. Constrained connectivity

To be electronically monitored was to be entangled in a network of penal surveillance, involving local and remote people, authorities, agencies, objects, and spaces. The reach and hold of power within that network differed from the penal power(s) characteristic of other forms of punishment and social control. Based on the works of Downes (1988) and King and McDermott (1995), Crewe (2011) and Crewe and Ievins (2021) have conceptualised and expanded upon the notions of soft power, tightness, and grip in order to better understand the nature and subjective experiences of modern penal power, particularly within prisons in England and Wales. The ‘grip’ of this type of penal power is that which fosters uncertainty, categorises people, and insists on self-regulation (Crewe and Ievins, 2021). In particular, the move from conceptualising ‘tightness’ specifically to ‘grip’ more broadly leaves more room to explore grips that are loose rather than tight and how these can both be experienced (*ibid.*). Many of the experiences captured in this study, and expanded upon below, resonate with the metaphor of ‘grip,’ as well as other interrelated studies on subjective experiences of penal power but also expand beyond them to reveal other aspects of being subject to penal surveillance (see Shammas, 2014; McNeill, 2019).

From a rather different perspective, Nellis (2018b) has argued for a different framework through which to understand the experiences of being electronically monitored. From a critical surveillance perspective, he argues EM is a form of ‘coercive connectivity’ characteristic of late modernity that further embeds certain populations of people in an intensely regulated system of digital connectivity, which feeds into a globalised data-driven economy (*ibid.*). However, when putting Nellis’ (2018b) concept to work and ‘plugging in’ the experiences and stories shared by participants, something new emerged (Jackson and Mazzei, 2012). While ‘coercive connectivity’ is relevant to this research, many of the participants I encountered in fieldwork would not have framed their experiences in this way. In fact, although the technology used for EM in Scotland during the time of this fieldwork was a form of digital surveillance, supported by an absorbent

database, soaking up information both directly and via ancillary data collection methods, most participants did not *feel* like it was surveillance because they were so used to the far more pervasive culture of surveillance that permeated their everyday lives (Lyon, 2019).

When I spoke with interview participants about surveillance, or being watched, or the abstract idea of surveillance data, however, these global concepts felt far-removed from the local concerns and experiences of being downstream of these systemic processes. It was not that participants were passively ‘complacent’ (Harcourt, 2015) with penal surveillance or that it was ‘unknowable,’ (Thrift, 2005) but that the way penal surveillance reconfigured and sunk into the texture of everyday life was more subtle, embedded, and latent.

This section seeks to highlight the everyday experiences of being monitored that both resonate with and differ from experiences of other forms of punishment, highlighting the different ways everyday life was reconfigured by EM. Discussions around time, routine, habits, and stillness will illuminate more about experiences of being connected to the penal surveillance network. Drawing upon Fraser and Matthews’ (2019) work on affective experiences, being monitored was a distinct experience that was difficult to explain and had both material and social consequences in people’s lives. It was not always coercive, nor was it always tight but nonetheless it gripped people in different ways. After analysing these temporal and rhythmic dimensions to EM, I will conclude that the everyday experience of being subject to EM is best understood as *constrained* connectivity which expresses the metaphorical grip of EM, but also conceptually breaks open the experience of subjectivity as a position that is both active and passive, as well as repressive and a reprieve (Gomart and Hennion, 1999; Gomart, 2002).

1.1 Temporalities and the subjectivities of freedom

Time is an important aspect of the punishment experience, and particularly significant for understanding the experience of being monitored. For participants, the experience of EM reconfigured temporal order and assigned different values to the meaning of time which was closely connected with perceived freedom. There were times of confinement, times of release, times on the tag, times off it, and for some, times back on it again. The curfew ran on cyclical time, typically separating the day from night and sometimes creating new meaningful routines for people but, more so, just making people hyper-aware of ‘clock-time’ and where they needed to be and when (Wahidin, 2006: para. 6.6). The complexities of time and freedom significantly informed this experience.

Although the participants interviewed (N=10) for this study ranged in terms of age, race, ethnicity, nationality, residential location, and employment, every single one had experienced some time in prison as well as time on a tag order. This prison experience significantly impacted how the relative ‘freedom’ of EM was felt and understood (De Vos and Gilbert, 2017). Most interview participants expressed that they preferred EM in comparison to prison, which is in line with most qualitative research on the perspectives of monitored people (inter alia Payne and Gainey, 1998, 2000; Hucklesby, 2008). However, this expression can only be fully appreciated within the wider punishment context. EM existed symbiotically alongside other forms of punishment, leaving people in a state of ‘penal conditionality’ where they were currently constrained but also aware of the omnipresent threat of a worse alternative sanction (McNeill, 2019b). For many participants, particularly for those with familial responsibilities, that worse experience was prison. However, the everyday experience of the curfew revealed that within the temporal ordering of EM, some curfews were worse than others. Particularly for younger people, the standard 7pm to 7am (seven to seven) curfews were more punitive and constraining than 9pm to 9am (nine to nine) curfews even though they were both 12-hour time periods, simply because the seven to seven meant having to go home earlier.

Marshall: Seven to seven is a bit... it’s alright. If the judge won’t allow you nine to nine, you’ll have to deal with it, but seven to seven is *[puffs air out]*... nah.

Ryan: It’s harder?

Marshall: I’ve done it before, but it’s just... it’s still early. It’s too early for you to be in. That’s what I used to think about when I used to – when I’ve done it before in the past in London. Seven to seven.

At the time of the interview, Marshall was on a nine to nine curfew, which was a relatively better experience than the seven to seven EM curfews he had experienced in the past. Some participants also compared the relative severity of different community sentences, such as Liam who preferred the human supervision order he was currently on over digital supervision he had had in the past, since human supervision orders only required something from him once a week (a meeting with a Criminal Justice Social Worker) whereas the tag required something from him every day (curfew adherence).

Ryan: How does it compare with the Payback order you're on just now?

Liam: Ehh... I don't really know. It really depends on how long you get. You get the same length of time on the tag and the supervision?

Ryan: Yeah let's say that.

Liam: Hmm.... I don't actual know about that one cause... you have the tag and being in at whatever time the Sheriff tells you to, or a supervision but you're basically free to move out and about and being in at whatever time you want but only going into see your criminal justice worker at least once or twice a week. So I might pick that one. Aye I pick that one.

Ryan: The supervision order?

Liam: Aye. Than the tag. The tag's just hard as hell.

The optics of surveillance and supervision played a role in the perceived freedom associated with EM. For example, while ordered to a standard Home Detention Curfew, Omar had written to the Prison Service requesting to be a 'guinea pig' for GPS monitoring (as part of a pilot study) which would have subjected him to location-tracking surveillance rather than presence-monitoring surveillance. He never received a reply, but the suggestion itself indicates a penal compromise he was willing to make. Whereas GPS-based technology would have increased his 'digital exposure' through more intrusive surveillance tracking, it was worth it to him if it meant less place-based curfews were imposed, which were impacting his ability to travel for work (Harcourt, 2015). One could argue that the ubiquity of surveillance measures in late modern society perhaps makes us 'complacent' about overexposure to digital surveillance technologies, and more so, about the unequal distribution of surveillance on marginalised populations and communities (Harcourt, 2015). However, Omar's interpretation of liberty prioritised his freedom of movement over the freedom from further data extraction; he cared more about mobility than privacy. It could also be argued that he understood the value of his abstracted 'data double,' and saw the bargaining potential it offered to get more of the freedom he wanted (Munro, 2009; Haggerty and Ericson, 2000).

Not everyone felt that EM was the better choice or would 'choose' it again. Matt described his time in prison, specifically in the protection hall, as something that mentally 'broke' him. Yet, he insisted that if he ever went back to prison (knowing he would once again be in the protection hall), he would never seek early release on a tag again because it was an even worse experience.

Matt: I've said since, I would never take the tag ever again. I would never do it again. There was times that I wanted to just rip it off. But just the simple fear of having to go back on a protection hall... I just thought no. I can't do that. I can't go back into that hall. So I just rode it out but I would never do it again. Never. It was just... too.... The alarm would go off all the time. The visits all the time. It just it made you a living wreck. It just really did.

The extent of contact he had with The Company significantly impacted Matt's experience of being subject to EM, which effected his perceived freedom. Matt was more tightly gripped and connected than most people to the network, oddly enough, because of constant technical connectivity issues. The combination of living in a more rural area with poor signal, ongoing house renovations, and perhaps faulty equipment meant that The Company constantly had to send out Field Officers to his house for equipment maintenance and replacement. Contrastingly, George had very little human contact from The Company during his Home Detention Curfew; this signified a steadier but 'looser' penal connection. He ultimately found the experience of being tagged better than his time in prison. George reflected on his initial thoughts about EM, when he thought he was going to get an alternative to prison, and how his view of EM changed because of his experience in prison and of release on a Home Detention Curfew.

George: [...] So I had, in that conversation about what might happen, electronic tagging was mentioned. That may be a route [the Sheriff] wants to go down as a punishment, blah, blah, blah. And I remember thinking, 'Okay, that sounds pretty terrible.' Speaking to my wife and saying, 'They're talking about that as an option.' And we both thought that's appalling. That's terrible. In retrospect, to have said that on Day 1, having lived experience [of prison], it would've been a lottery win. But it wasn't to be.

Within a period of five and a half months, George's view of EM went from being 'pretty terrible' to a 'lottery win.' This demonstrates the need for a more contextual, complex understanding of the penal severity, restriction of liberty, and experience of time that goes with being subject to penal monitoring. The following section will explore this notion in greater depth by examining the routinised and affective qualities of being tagged.

1.2 Undoing and redoing routine

Routine was an important aspect of what it was like to be monitored. The constrain of an imposed daily routine or timetable played a significant role in how people perceived their restricted liberty. For many, a tighter routine signalled a tighter connection to the network of people and organisations punishing them. Yet, EM also freed people from the imposed timetables and routines of prison life which Wahidin (2006: para 5.2, 6.5) has pointed out

as a technique for disciplining people through synchronisation. As Marshall reflects in the following excerpt, the tag provided an escape from the routine of prison:

Marshall: Yeah I always prefer tag, in a way, than sittin' in prison. I rather be tagged and I'll do it any day if I always get the chance, like. Obviously, after all these cases I'm not tryna put myself in anuva pickle, but, yeah. But if worst comes to worst, I always prefer it cause it's like I says, it's better than you getting 24/7 controlled, like. They tell you when to wake up, when to eat, when to come out your cell, when to go gym. It's boring in there. Any human being that say they like [prison].... they something wrong with you [*laughs*]. Cause yeah... it's just.... So yeah the tag is a good thing, innit? It's a good thing in the way where it keeps you out. You're more... freedom, innit? You're more in society collectively. Society, instead of just being in there. Like I said, you're controlled 24/7. Like imagine... right now, what's the time?

Ryan: Think it just turned 11.

Marshall: Some people in gym, right now. Or the ones that don't do gym just in they cell. Or the ones that don't do education just in they cell. Or the ones that don't have no work, like cleaning the jails, they just in they cell. So that gets kind of boring. And imagine the TV channel is just... you get an extra channel but it's boring, like, you can either sleep or do exercises. So yeah, tag is way better. Way better.

For Marshall, the timetable of prison was so deeply ingrained that he was able to recall exactly where people would be at that moment by looking at the time on the clock. Getting the tag as a community sentence, at the very least, allowed him to self-govern how and where he spent his time and he did not have to justify his movements through participation in seemingly 'productive' activities. Being monitored meant being out of prison, and in turn, made Marshall feel less isolated, less segregated, and gave him some control over his life and routine.

Many participants mentioned the importance of certain dates that stuck with them during their experiences of other forms of punishment, notably, the Earliest Date of Liberation associated with imprisonment. As that date drew nearer, it was accompanied by anxiety and/or excitement, which two participants referred to as gate fever; a phenomenon that has been written about in other criminological research as 'release anxiety' (Crawley and Sparks, 2006; Shammass, 2014). In fact, Shammass (2014: 111) has argued that many people feel a general sense of anxiety in moving from a completely bounded environment to more open ones, where the feeling of 'boundlessness' can be a negative rather than positive effect of freedom. Most participants acknowledged that leaving prison was a more significant event than getting the tag removed and there was not much meaning attached to

the EM version of the Earliest Date of Liberation. Interestingly, there was far more significance attached to the daily curfew times; every participant, whether they were tagged at the time of the interview or 10 years ago, remembered their exact curfew times. The curfew represented a new routine imposed on their lives, punctuating and dividing every day between confinement and release.

Monitored people were anxious and worried about getting home in time for curfew in the evening. Some rare early risers also worried about leaving too early in the morning before the curfew lifted. The latter was a quick way to accumulate time violations, when the anxiousness to begin the day, not lose precious free time, or general grogginess made people forget to check the time.

Jen asks him what happened this morning and lets him know he left home too early. The man apologises and says he totally forgot about the morning curfew. 'I didn't even look at the time,' he says, because he was just sleepy and getting ready to go to work. [...] He had gotten a call from his boss asking him to come in earlier so he just jumped out of bed and ran out the door.

(18/4/2019 field diary excerpt)

Such an easy mistake cost this person a 10-minute time violation. Time violations on this end of the curfew were often surprises for monitored people, since they were not notified or questioned about it by The Company until later that night when curfew began again. Despite the relatability of forgetting to be aware of clock-time in the morning, the setting in of curfew in the evening was by far the most anxious part of the day for monitored people as they worried about getting home in time. The mass effect of this was most evident at the National Monitoring Centre, as it neared 7pm and the cacophony of action that began as phones started ringing, names were shouted, and different coloured events were generated in the queue. It indicated that people were rushing to get home, frustratingly stuck in traffic or on public transport, and worried that they were about to be penalised for lateness. The imposed routine of the curfew impacted their lives, relationships, and perceived freedoms daily.

George: So I think my times were 7:15 in the morning until 7:15 at night. And I don't know how that compares with everyone else but that was the restriction I was given. Seven to seven, basically. Initially, that was a lot earlier at the end of the day. I was getting home for half five. You know? *[Laughs]* I'm not taking any risks with traffic. And I'm not taking any risks for not being there.

Rob: I didnae mind having to be in at half seven at night. A lot of the time I used it to my advantage. ‘No, we’re no going shopping til half 11 at night. We’re going home noo. I have tae be home.’ There was one time where I couldnae get the shopping oot of the car cause we picked a daft time. Getting back to the home, there were some road works or whatever and when you phone [The Company] they were very unsympathetic. ‘Aw it doesn’t matter. It’s your duty to get yourself back in the hoose. You know you’ve gottae be at your unit. It’s your fault if you’re not there. I don’t care about traffic. You should’ve left in plenty of time.’ And you’re like, ‘Aye, alright.’ Straight doon the road. Half seven, straight in the hoose, sits in the chair, and they’re bringing bags in from the car. And they’re saying, ‘Why aren’t you helping?’ ‘Well, I cannae. I’m not allowed oot there.’ And that, that one particular instance created a lot of upset and hassle because I was accused of being a lazy bastard, which generally I am... but on that particular occasion there was no way I could go back oot to the car cause it was just right on the line.

The routine of curfew had a grip over George and Rob. George was anxious enough about the curfew that he ensured he arrived home an hour and 45 minutes earlier than necessary. Over time, he perhaps relaxed a little bit, but it nevertheless indicates the significance of that time stamp, where the liberty he was entitled to became a potential ‘risk’ at a certain point in the day. Rob’s race to get home and within the range resonates with the many calls overheard at the National Monitoring Centre, where even the good will associated with incoming calls would not save someone from a time violation. This was more difficult for Rob because this experience highlighted just how un-free he was, in comparison to his family and those around him. He was free enough to be with his family, to see them face to face and engage with them without being miles and landlines away, but paradoxically, it reinforced that there were certain activities he could not participate in, to the frustration of both himself and his family (Payne and Gainey, 1998; Vanhealemeesch, 2015, cited in De Vos and Gilbert, 2017).

In their study on the ‘pains’ of EM, Payne and Gainey (1998: 158) identified ‘watching others’ as a unique and painful consequence of being monitored. This ‘pain’ relates to being seemingly enmeshed in ordinary everyday life, but unable to do what others are doing, relegated to the side-lines and unable to fully participate and integrate. In this way, liberty was conditionally doled out to those being monitored, but its limits were also something they confronted daily. De Vos and Gilbert (2017) have argued that this ‘ongoing confrontation with freedom’ faced by people subject to EM can be experienced as more severe than other ‘harsher’ forms of punishment with more deprivation of liberty (open and closed prisons). Being monitored not only meant self-regulating one’s behaviours, but also adapting on a daily basis to a routine that took and restored their liberty at different times in the day, where the act of taking out the bins, bringing in

grocery bags, or hanging out with friends went from being completely acceptable to completely unacceptable from one moment to the next. Deviations from the imposed routine were answered with ‘a big stick’ (George), which might amount to a couple minutes-worth of violation, or more seriously edge one over the ATV threshold and result in a formal breach and potentially a recall. Being monitored allowed one to maintain connections to family, friends, and community life, but also disrupted and constrained those connections daily.

1.3 Stillness

EM has been characterised as a mobile, unfixed, or ‘ambulant’ punishment that allows for free movement, albeit with some or many conditions (Morgenstern, 2016: 74-75; McNeill and Robinson, 2016). However, for people subject to EM in Scotland it was only ambulant for half the day. The other half of the day was characterised by stillness, as people were confined to the range set by The Company, digitally tethered to the connection between their ankle, the box, and the Monitoring Centre. The balance between being mobile and being still was complicated. There were consequences if you left home when you were not supposed to, but there were also consequences if you did not leave home often enough. Too much stillness could de-calibrate signal, making the connection to the wider penal surveillance network faulty. Based on the digital, yet limited, surveillance methods used by The Company to monitor people’s wellbeing, too much stillness was also interpreted as a possible indicator of death and triggered an automatic ‘welfare’ check. Therefore, stillness was just as important as movement, both materially and semiotically.

Stillness is an interesting analytical lens to better understand experiences of what Gacek (2019: 191) has similarly pointed out as being ‘stuck’ at home. However, the concept of stillness, influential within both legal and migration studies (see Blomley, 2010; Gill, 2009) emphasises the affective properties of and tensions between mobility and stillness. Particularly in Gill’s (2009) conceptualisation of it, stillness renders people socially visible as a response to the constraining situations they are in. People understood and experienced the imposed stillness associated with EM differently from one another. For some, it was oppressive, whereas others perceived it as an opportunity or a welcome disruption. Unlike ‘penal waiting’ experienced by people in prison, stillness and waiting while on a tag did not happen in a compartmentalised or socially severed environment (Armstrong, 2015: 134). The familiarity and established associations one typically had with everyday home space made stillness and waiting a confusing and oppressive experience for some people.

Matt: There was just times the signal would break. And it would go off. [...] Every three or four days, middle of the night, it would go off. And then I would get a phone call and it was the box ringing so you'd have to run down to the box and be like, 'Hullo?' And they'd be like, '[Matt]?' 'This is [Matt].' And they'd have questions they'd ask you to double check that you were who you were. Then they'd be like, 'Right. Somebody will be out shortly to see you.' Then you'd just sit there and think, right, I don't want someone ringing the doorbell and I miss them, so I'll sit in the living room and wait. And you could be two, three hours just waiting. It could be 2:00 in the morning, you'd be sitting there til 5:00 in the morning like that, waiting for somebody to come to the door to check that you're in. Sometimes they would phone up and say that but nobody would actually come out to see you. It just.... It really drove me up the wall. It really, really did. And because it was always during the night, that these things were happening. It was always during the night you'd always have to sit and wait for these people to turn up.

Matt's experience of stillness was oppressive. He was subject to the whims of The Company, unsure of the *why* and especially the *when*, yet expected to cater to the unknown; a penal grip that rooted him to the spot. Stillness was not about what he got up to during curfew time, but rather, something that was done to him. In line with experiences of doing time in prison, Matt was 'in stasis, stagnant, waiting, yet always in process' (Wahidin, 2006: para. 6.15). In this case, he was potentially being processed by The Company, awaiting a decision or visit that might never even come. He endured stillness like a mind game that 'drove [him] up the wall' because of the uncertainty, confusion, and disorientating frequency of interrupted sleep. That experience of waiting was itself punitive and arguably worsened by the fact that it happened in his own house rather than an unfamiliar environment like a prison cell. Unlike the rest of his family asleep in the house, he had to sit still on the couch for hours and just wait in wakeful anxiety. Stillness isolated and segregated Matt from the rest of his family, creating a boundary between the included and excluded, even within the home (Gill, 2009). Stillness was not just a consequence of waiting, but a technique of control, discipline, and segregation.

Some interview participants acknowledged that because of their age, family situation, or lifestyle, being still after 7pm at night until 7am was normal for them and already part of their everyday routine, without the imposition of the curfew and tag. Other people adjusted to stillness of EM and incorporated it into their new or existing routines. Stillness was enacted through waiting, as experienced by Matt, but it also included mundane activities such as cooking dinner, watching TV, playing video games, having friends over, and most commonly, sleeping. Interactions between monitored people and The Company during curfew hours were often framed in terms of whether Monitoring and Field Officers were

getting in the way of someone's sleep. There were strong associations and meanings attached to sleep and its intimacy and sanctity, as well as the right to sleep.

It was about 10:10pm by the time we got out of the car since we got lost and had trouble finding the place. We wandered around on foot for another half hour or so, looking for the right building number. There was a massive fox down one of the lanes that scared us both. For some reason, the building number wasn't where the map indicated it was, so Beth had to resort to calling U's box to ask for directions. U answers after a couple rings and asks what's up? Beth tells him that his tag has a low battery which needs replaced. Typically, with these visits, people aren't warned ahead of time or even aware of the battery life on their tags. U suddenly gets pissed. I hear his voice raise on his end of the phone call. He asks why Beth would even think of coming over so late at night without letting him know beforehand? Beth retorts that she is allowed to come any time during curfew hours and doesn't need to warn ahead of time. She asks again what the address is, but U tells her he's not going to tell her and that Beth can't come up the stairs now. He says someone will have to come out another day at a more decent hour and give him a head's up. Rather than argue, Beth tells him that someone will come tomorrow. U followed up with the last word since he was so angry and said that if the next officer came at such a late time he'd tell them the same thing. Then he hung up.

(22/5/2019 field diary excerpt)

Ten o'clock seemed to be the unanimous time for most Field Officers to acknowledge that it was too late to make house visits to monitored people without warning. Despite this admission, Field Officers nonetheless worked until midnight with the understanding that they might be told, as described by Beth, to 'feck off.' Stillness was imposed on people subject to EM, but it was also evident that some people took ownership of it and drew on it to resist further impositions, despite the inevitable consequences it had (i.e. breach reports). Stillness rooted people to the spot, but also provided ground to stand on and reclaim.

While stillness was understood by some as a negative, stagnant experience, others created new opportunities in the stillness of being monitored and actively made it 'work' for them on their terms. It is well established in criminological literature that EM is an intentionally 'disruptive' technology (Reagan, 2017; Berry, 2019; Hucklesby *et al.*, 2020). Being monitored constrained people's behaviours and actions by enforcing curfew; it also disrupted relations (and networks) that some people no longer wanted anyways. Both Andrew and Scott in the excerpts below express how penal surveillance was a welcome intervention in their lives, contrastingly highlighting the opportunities EM took away or provided:

Andrew: Anyway... I enjoyed [the downtime] and got a wee bit of relief. I got a wee bit of relief fae it as in just that 'Ahh.' I didnae nee to go and dae this anymore. You could still dae it during the day, but no in the night-time. I was very chaotic. Very dangerous situations I would put myself in. So I got a bit of relief from it and always said that about when I go to prison. I was just like *[sighs]* breathed easier because I didnae have to go through all the carnage of my lifestyle. Got relief for a wee while. I did get that from the tag as well. I got a wee break fae ramping up criminal activity and running wild. I had to rein it back in a wee bit to survive on [the tag], to stick wae it.

Ryan: What were you doing then during all that time? You mention how you were feeling – planning and plotting and that – but how did you pass the time during those months?

Stuart: To be honest, I was probably at a point where I wanted tae kinda change my life. I just didn't know how. So the [Clyde], known for being quite a rough area, right? There's a lot of positive influences in the area, people who've been through the same background and managed to change their lives. And they seen this as an opportunity to get inside my head, so I had a lot of people visiting me inside the house. And spending time wae me and kinda trying to change my thinking and my trains of thought and stuff like that. [...] You know? And I had the ideal opportunity cause I had a lot of free time, where I wasn't leaving the house.

EM and the routine of curfew interrupted the lives of Andrew and Stuart, but this was not reflected on negatively. Rather than passively marking time, they both found ways to translate meaning from experiences of stillness (Wahidin, 2006). The grip of stillness confined these two people, but also freed up their evenings. For Andrew, he found relief in disruption and embraced the 'reins' controlling him. Those hours of stillness were a solace during a time in his life when he was beginning to rethink his social networks and lifestyle. Gill (2009) found similar experiences amongst asylum-seekers where 'stillness was sanctuary' and a reprieve from constant movement and up-rooting. Stuart was at a point in his life where he wanted to make lifestyle changes, but unlike Andrew who needed to be removed from his environment, Stuart embraced his environment by making new connections. This new network, an 'ensemble of allies,' formed around him and not only supported him in keeping to his new routine, but actively used the stillness of that routine to connect with him in the first place (Berry, 2019: 7).

Stillness not only impacted the person being monitored, but others who were entangled in the extensive penal surveillance network as well, such as family. For example, Andrew's mother found as much relief in him being tagged, or in prison, as he did because she did

not have to worry about where he was. Lewis expressed a similar sentiment about his grandparents.

Andrew: I think my mum liked it. My mum was very aware of my circumstances. Very aware of my lifestyle so she was just constantly wondering where I was. So I think because I was there, she liked it. But again, she liked it when I was in prison as well cause she knew where I was. She knew I was safe. Which is a hard kind of truth, thinking about now. Yeah. I think during that period where I was at her hoose on it, she liked cause she knew I was in the hoose and she knew I was safe. I think it gave my mum and dad a bit of peace of mind. For a few months, anyway.

Lewis: I was with my gran and granda. I'm still with them now.

Ryan: Do you remember what they thought of it?

Lewis: They liked it and 'aw. It kept me in the hoose, didn't it? I was in at 7 o'clock. They didn't have tae worry about me.

Stillness had an affective quality to it that significantly impacted the experiences of being subject to EM. It encompassed not just the day-to-day confinement of being subject to a routinised curfew, but also the wider contexts of peoples' lives and their subjective experiences of time and freedom. It was not about immobility or inactivity, although those were possible, but more about disruptions and how people felt, resisted, or embraced those disruptions. People drew upon bodily memories of other temporal regimes to compare the experience of being monitored, demonstrating the complexity of how the carceral can be integrated into analyses of EM experiences while still leaving room to explore other dimensions as well.

Using the criminological literature on 'grip' (see Crewe and Ievins, 2021), Nellis' (2018b) work on 'coercive connectivity' and the perspectives of my interview participants, I argue that *constrained* connectivity is a better way to explore the more mundane, everyday experiences of being subject to EM in the context of this study. 'Constraint' expresses the metaphorical grip of EM, but also conceptually breaks open the experience of subjectivity as a position that is both active and passive, as well as repressive and a reprieve (Gomart and Hennion, 1999; see Chapter 3). This original concept brings together theoretical approaches from both the sociology of punishment and sociology of technology to forge a more expansive understanding of penal subjectivity that accounts for the positive, negative, and mixed feelings people can experience. Constrained connectivity illustrates

the ways technologies of penal power become embedded in everyday life and the different ways people live alongside EM. These findings demonstrate the complexities and subtleties of articulating what it was like to be monitored; the small temporal punctuations, the habits and micro-confrontations, and the stillness.

The material consequences of this penal grip, of course, was that stillness allowed for monitored people to be visible, available, and visited. The significance of connectivity is that it implies a connection or relation elsewhere. Threaded throughout all of these sections, these findings reveal much about the relations between monitored people and EM Officers and the two-way street of surveillance. This lends itself to the next section of this chapter, which digs deeper into that relationship from the other side of the computer screen: the officers who enact monitoring. Doing the work of penal surveillance, like being subject to it, did not always feel like a hegemonic exercise of domination, but rather a combination of small, everyday decisions and actions that cumulatively performed EM as a practice. These latent practices and subtle choices reveal the power of discretion, the intimacies of watching, the ways in which the emotional enactment of EM fell unequally on certain officers, and the ‘dirty’ business of it all.

2. The intimacies of watching

Whereas the previous section covered the complex, temporal dimensions of constrained connectivity and what it was like to be monitored, this next section will consider the operational enactment of EM through the people, things, spaces, and flows of information that formed part of the penal surveillance network. Monitoring involved both human and non-human watchers, who/which interacted with monitored people in different ways. Up-close or far-removed, watching was an intimate experience. The findings from this section highlight the messy, dirty job of working for The Company and what it meant to do this work. This involves analysing not just the nature of work that was carried out by EM Officers, particularly those who has more significant relations with monitored people, but also the varying ways that work was carried out. It revealed that EM is emotional work, enacted differently based on gender, and involves practices and rituals that maintained divisions and boundaries between themselves and those they surveilled.

2.1 Monitoring as emotional labour

We left soon after and went back down to the car. She was quiet for a moment, and then told me that he reminds her so much of all the boys she dealt with in

her previous job. ‘He’s just one of those lost boys.’ [...] As we drove back, she joked again about me being an undercover boss and how she was going to get sacked if that was true. We both laughed. She told me she was just winding me up. She likes to be informal, to crack jokes and put everyone at ease, including herself. She often feels uncomfortable going into people’s homes and private spaces. She makes jokes and uses banter to build rapport. ‘To feel like I know them.’

(22/5/2019 field diary excerpt)

Whereas Monitoring Officers represented ‘action at a distance,’ Field Officers were the physical and embodied representation of EM (Paterson, 2007). Field Officers were significant actors uniquely located within the penal surveillance network, at an interface, in that they were constantly translating policy into practice and action through face-to-face relations with those being monitored. These interactions required an improvisational, appreciative, and yet authoritative approach to work. By announcing themselves as ‘The Company’ or ‘Electronic Monitoring’ at people’s doorsteps, they immediately reinforced the idea that they were representative of a larger source of authority, yet they also represented themselves as people that had their own feelings and their own responses towards events and people. House visits were significant moments for monitored people to meet The Company, to confront Field Officers either as agents of the penal surveillance network or as potential allies to advocate on their behalf. In the excerpt below, I had been out on a ride-along with Pete who was visiting a monitored person for what was now the second night in a row. Before entering the flat, he explained how there were several options he had to help resolve the technical issue with this person’s equipment and that the choice he needed to make had varying consequences.

We pulled up the high-rise building at 7:10pm roughly. Pete waits a moment while we sit in the car with the engine off and goes over some details with me. He had been to this guy’s house last night because he was recorded as absent the previous night around 12am for a couple minutes. After Pete left last night thinking the issue was resolved, the guy was recorded absent twice again (4 min. followed by 5 min.) late at night. He denied the absences again. Pete draws me into this one-person focus group in the car and tells me that there are two choices he can make when he gets inside and assesses the situation:

1. Resetting the range from Category Medium to Category High, which would mean there had been an error on The Company’s part to correctly assess the size of the flat. This would result in the absences being wiped away because The Company was at fault.
2. Relocating the box within the flat which would still involve resetting the range but would mean that the fault indirectly lies with the monitored person rather than The Company. The absences would remain on his record and be added to his ATV.

After saying these out loud to me Pete realised there was... not exactly a third option, but perhaps a different reason altogether for the absences: an old tag that needed replaced. 'I wonder if it could be that?' It seemed like Pete was really aware of the discretion he could exercise in this scenario and the power he held over the person and the narrative of this visit.

(27/11/2018 field diary excerpt)

Attending to a Denied Absence, Pete was in a unique position to either override the existing system narrative or confirm it. The differences between the two options he proposed were logistically minute, but the choice carried with it a significant display of discretionary power in which he was potentially able to redistribute a penal sanction (time violation/absence) if he chose to. Interestingly, this also highlights the technosociality of EM-based control. Pete and the current Denied Absence narrative generated by the EM system software played off one another, as a hybrid combination of intentionality and automation (Brown, 2006). This perhaps points towards the gap in knowledge identified by McCahill (2002) and Hucklesby (2011) between the capabilities and practical operation of surveillance technologies. Pete relied on the realities generated by EM technology to help him construct a version of events that would support his discretionary choice, which in turn, significantly affects the monitored person's perceived compliance. For continuity, the box was relocated within the flat, the range was reset, the monitored person was refitted with a new tag, and the time violations remained on record. This example encapsulates how monitoring by The Company was not a matter of pure technological determinism, nor was it constituted exclusively by human action.

Those moments in the car with two very different Field Officers reveal the emotional weight of discretionary powers and the responsibility of being at this significant interface in the penal surveillance system. 'Emotional labour,' particularly the supportive, pastoral aspects associated with some other criminal justice professions such as social work or even probation, were not formally built into the job remits of EM officers nor The Company's commercial imperatives (see Hochschild, 1983). Yet, I argue that emotional labour was nonetheless a vital but informal and finite resource Field Officers used to conduct their work that was often constrained by formal managerialist and commercial priorities. In line with Hucklesby's (2011) work on EM officer credos and work culture (for more on this, see Chapter 2), some officers went beyond their minimum duties to build rapport with monitored people. One or two EM Officers stood out as consistently demonstrating this extra emotional labour. Other staff occasionally demonstrated this approach to work as well, but on a more subjective and less consistent basis. Most Officers provided a baseline

duty of care in line with their job description which involved minimal conversation so as not to offset work efficiency (Hucklesby, 2011: 67).

The man on the phone was confused because he knew he was a little late tonight, but thought he was only 5 minutes late. He knew for a fact he was in the door by 7:05pm. He kept talking and asking questions, but Doug was impatient and had enough information now to enter that the time violations were 'confirmed by MP' and tried to end the call quickly. He kept cutting in and going 'yeah, yeah, aye' and doing that thing where you begin to slowly put the phone down. He says sort of to me, sort of just out loud generally, that he keeps getting the chatty people tonight. 'Don't mean to be harsh, but you can tell when they're at it.'

(25/7/2019 field diary excerpt)

In the example above, the 'chatty' person on the other end of the line was interfering with Doug's work efficiency. This demonstrates that even Monitoring Officers, physically removed from 'the action' but nonetheless in contact with monitored people, also had to navigate certain aspects of up-close work at an interface of the EM network. Digital technology enabled different 'economies of presence' (Mitchell, 1999) or as Nellis (2018b) has more relevantly put it, 'economies of penal presence.' Digitally mediated punishment provided affordances such as remote contact and cheaper surveillance, but also forced other EM Officers to negotiate the emotional labour of contact with those they were surveilling. This example is not meant to depict Doug as lacking empathy, but rather to highlight that emotional labour was an unrecognised, unrewarded, and therefore low priority part of the job of monitoring.

Nonetheless, both Field and Monitoring Officers sometimes made small efforts to emotionally connect and manage interactions with monitored people: frequent use of someone's name during conversation; listening; taking a seat rather than standing the entire visit; or taking shoes off if it was obviously a no-shoe household. Even Court Report Writing Officers, who were almost entirely removed from the action and focussed on a very narrow range of managerialist tasks found ways to draw upon emotional labour to make their work feel more meaningful and to feel connected to those that they wrote reports about.

The next report Gwen worked on was another Breach Level 1: FTI [Failure to Install]. It was for a new order, a young man who missed his induction visit. The Event History Report (EHR) detailed that the Field Officer at the time stood on the doorstep with the person's mum and listened on speaker phone as the mum tried to reach her son to see where he was. The son answered but

sounded drunk, according to the Field Officer, and asked if The Company could come pick him up from the pub to take him home? Gwen read all of this from the EHR. She laughed and said, 'Oh, bless him.' [...] In the Circumstances of Violation section, Gwen initially includes the anecdote about the person being 'inebriated' and asking for a ride from The Company. She reads through it a couple times and then goes back and erases it. Now it just says the man wasn't home for his induction and called to let his mother know he was across town and wouldn't make it home for a while. Gwen tells me she deleted that part because it's not relevant for the report and not the court's business. She can't do anything about it being mentioned on the EHR, but I think she was implying she felt like removing it from the Circumstances section was charitable enough.

(22/8/2019 field diary excerpt)

Gwen did a small but meaningful favour for this person, with the limited resources at her disposal. She used the ancillary surveillance data about the context of the visit to forge an emotional connection to the person, meanwhile, she also removed that extra information from the court report so that the person would not be further penalised for it. This was significant because Gwen used surveillance data from the Event History Report to construct a version of the person she, and in turn the reader of the report, could empathise with. This is in line with Haggerty and Ericson's (2001) 'data double,' or the reworked notion of the penal avatar discussed in Chapter 5. It is also an interesting caveat to Paterson's (2017) argument that penal EM technology and surveillance does not capture the complexity of the human experience. That is true in many senses, but it opens up a different discussion about what complexities it does capture and new possibilities for embodied (and disembodied) experiences.

2.2 Monitoring as gendered labour

However, while recognising the varying emotional labour practices involved in enacting EM, it is also important to recognise the gendered nature of this unrecognised and unrewarded labour as well. First, the Field Officer occupation was a gendered occupation. It was not that there were more women Field Officers, nor that being a Field Officer was inherently a feminised job, but The Company had a rule that men who worked for The Company were not allowed to visit women who were tagged. Women who worked for The Company could visit anyone subject to EM, however. Although there were less women employed as Field Officers, this rule made them far more valuable simply because of their gender. One noticeable consequence of this was that the geographical coverage of jobs for a man Field Officer might be clustered or concentrated in a specific area of the country for

the night, whereas a woman Field Officer typically had more ground to cover in order to visit any tagged women on the list.

Beyond the occupation itself, observations revealed that women and men Field Officers enacted monitoring differently. I argue this was inextricably tied in with emotional labour, which Hochschild (1983) argues has more significant consequences for women. Some of these were small differences. For example, Beth and Louise (both women) always sat on the couch with monitored people to explain how the induction would proceed and what the order entailed whereas Jack, Dave, and Pete (all men) stood the entire visit, literally looking down on the monitored person seated on the couch. This small difference changed dynamics. However, there were more profound gender differences as well, particularly in how different EM Officers responded to domestic disputes between monitored people (typically men) and their co-resident partners (typically women).

On the way back out to the car, Jack told me that he's dealt with so many domestic issues in this work and different situations of people getting kicked out of their houses because of fights with partners. He said that generally he always asks the couple if they really mean to break up or if it's just a small fight? He warns them that the paperwork takes a long time and will ultimately lead to extending the period of time on the tag just because of the hold ups the paperwork causes.

(26/7/2019 field diary excerpt)

Jack's approach to these situations was to ameliorate, or at least pacify, the issue by reminding both parties of the paperwork involved in kicking someone out of the physical residence and digital range they were confined within. These situations were known as a Premises Holder Withdrawal of Consent, or PHWOC (pronounced 'fwock'), which allowed the signer of the lease or owner of the house (if not the person subject to EM) to withdraw consent on behalf of the monitored person and effectively kick them out. When a premises holder invoked this right, it automatically levied the monitored person with a Level 1 Breach (the highest level). During a shift with Campbell (a man) in the National Monitoring Centre, he similarly reminded someone over the phone that getting kicked out would be hassle and negatively impact them. He suggested to the monitored person, another man, that he try and make up with his 'missus.'

By contrast, women EM Officers noticeably responded in a quite different way. While there were small differences between the way monitoring was done, there was one house visit during fieldwork that evidenced just how differently this work was enacted and the

consequences these differences can have. During a house visit with Beth, we walked immediately into a volatile situation between S, a man subject to EM, and his girlfriend. S's partner made it clear she wanted S out of her house.

Beth says to her that if she wants, she can sign some papers which will revoke her consent to letting S be tagged there. Beth asks if we can all go downstairs so the paperwork can be properly looked at? On the way down the stairs S is pleading with her to reconsider revoking consent. He tells her he'll go back to prison if she does this. 'You're really gonnae breach me?' He repeats this a couple times. S is begging her to let him stay another three days at the most so he has time to file a change of address with the courts, rather than breaching. He promises to be out of the house in three days time. 'You're really gonnae breach me, send me back to prison?'

(continued below)

PHWOCs gave co-residents the power to have control over their house, but also put them in an uncomfortable position where they can become responsible for what happens to someone else and feel pressured by that responsibility. This woman confronted S, accusing him of a number of things, including that he had been promising to move out for weeks now but had not done anything to make that happen. He paced the room, getting angrier and more puffed, as she asked Beth for the paperwork.

S has stopped pacing and leans against a wall in the living room, sinking down so he's crouched with his knees to his chest. Beth asks her if she definitely wants to sign it? She says yes. The document is signed and Beth goes into her bag for scissors. She tells S she's going to cut his tag off and he offers his leg. He asks what will happen now? Beth tells him that he should find somewhere else to stay and that he should contact his solicitor because he'll get called back into court soon enough. He is still standing there for a minute so his (now?) ex tells him to leave. He says he wants to say goodbye to the kids upstairs but she tells him to fuck off and get out. Beth also tells him he should leave. Beth sits next to the woman on the couch and waits with her for S to walk out the door. There is finally a moment of calm in the house. I sat with them after realising how tense I was. Beth is consoling this woman, who is still quite tense, and tells her that she did the right thing and to not give in. 'Stay strong,' she says. She's angry and upset but says she'll never let him back in the house around her kids. Beth asks her if she's going to be okay? She says aye, that she will be now.

(22/5/2019 field diary excerpt)

This example was extreme but highlights how gender relations played a significant part in the enactment of monitoring. Whereas many of the men I spent time with only looked at the consequences of what would happen if a monitored person left, Beth considered the

consequences of what would happen if they stayed. It easily could have been Jack, Pete, or Dave who attended to that visit and it could have easily ended with this woman being convinced by both men into letting S stay. Beth's actions and behaviours required more emotional labour, as she calculated where to position herself, when to listen, and what seemed right in that moment, regardless of paperwork.

This finding highlights the gendered aspects of what it meant to do monitoring, but also how many of these messy and complicated responsibilities extended out to other people entangled in penal surveillance as well. The job of being an EM Officer involved either inserting themselves in or at least often finding themselves in private spaces and private matters which required a level of emotional work. Based on fieldwork, in most ordinary circumstances, this form of labour was enacted through small, everyday decisions and actions. Yet, this experience with Beth in what was not an ordinary circumstance stood in stark contrast to the typical off-hand advice of grovelling to one's 'missus.' It revealed deep-seated assumptions and expectations about gender, which one way or another, meant that extra responsibilities fell on women.

2.3 The dirty business of EM

Field Officers worked remotely, roving around the country as fibrous extensions of the penal surveillance network (Latour, 1996). Working almost exclusively at night (mostly in the dark), and out of direct oversight of The Company meant there was both a peculiar vulnerability but also power in being a Field Officer. Although Field Officers worked in places that did not belong to them, they often took authoritative control when making house visits. Yet, with some exceptions, the majority of ride-alongs with Field Officers depicted visits as awkwardly polite interactions. 'Backstage,' and without the presence of The Company around, however, most interview participants described negative experiences of having these representatives of The Company in their homes (Goffman, 1959). These 'awkward polite' visits were dramaturgical performances maintained between the watched and the watchers and it was evident that some participants begrudged Field Officer visits.

Stuart: I kinda felt.... I was very anti-authority. So right away I've got two strangers in my home who represented authority. They might as well have been police officers. And they were dictating to me, you know. 'This is the way it's gonna be, this is the way the next four and a half months of your life...'. And there was a lot of 'if you do this, this is what will happen.' So I was very uneasy about having these people in my home. Because previously up til that

point, any authority in my home was coming to arrest me or bust ma hoose or so... yeah, it wasn't a very good feeling.

Cyrus: The first memory was when they came and actually put it on my ankle. You know? And the officers – well, you've been out with them and I don't know what kind of behaviour they have in front of you, as a complete outsider, but they're no very nice. [...] Even on subsequent visits, they still weren't very nice. You 'spect people to wipe their shoes, even if they're no' gonnae put on over-shoes. You know what I mean? But they just marched intae yer house and that was it. You know, like... ye would hae thought they had the right, is no' like they had the right. It was like there was *nothing* you could do about it. 'We're coming in and that is it.' You know?

While the previous section highlighted the emotionally complex work of enacting monitoring, it is also important to balance that with how monitored people interpreted those visits and what Field Officers represented. For Stuart, Field Officers represented one amongst many regimes aiming to control and regulate his life. For Cyrus, there was a sense of arrogance amongst Field Officers who marched in, dirtying and polluting the sanctity of his house and his freedom. However, as the subjects of a penal regime this mild hostility towards The Company was not surprising. On the flip-side of this, however, many EM Officers characterised monitored people in an unflattering, homogenised way as well: as the dangerous, risky Other (Douglas, 1966). And in turn, the enactment of monitoring was risky because monitored people were constructed as 'malfunctioning' subjects by and through the effects of the people and things that regulated their lives (Paterson, 2007: 5). Penal surveillance was, therefore, a necessary evil, or a 'dirty' job because EM Officers worked with people they constructed as being on the 'bad edge of postmodernity' (Ashforth and Kreiner, 1999; Davis, 1990: 224).

Ashforth and colleagues (Ashforth and Kreiner, 1999; Ashforth et al., 2007) conceptualise 'dirty work' as certain kinds of work engaged with populations deemed stigmatised or 'socially tainted.' This concept has been used in previous research to show how relations with people being punished by the justice system 'run[s] the risk' of tainting or dirtying the work of being a probation officer' (Mawby and Worrall, 2013: 8). In what follows, this notion is be used to better understand the process of 'contagion' in which one person perceives themselves as dirtied from associating with a differently categorised person (Douglas, 1966: 30). Field Officers relied upon certain rituals, enacted through associations with various material symbols of cleanliness, to convey when they felt 'dirty'

or ‘contaminated’ from face-to-face contact with monitored people. These sanitising rituals served to reinforce difference and maintain order.

Dirt is symbolic and highly subjective. As conceptualised by Mary Douglas, it is ‘matter out of place’ (1966: 34) or anything that ‘offends against order’ (1966: 2). In this sense, sanitising rituals reinforced that some monitored people were out of place, socially marginalised, and symbolically polluted. Field Officers used cleaning techniques to classify, manage, and ‘Other’ those who were dirty (*ibid.*). The penal monitoring done by Field Officers was a tactile experience. Unlike other EM Officers at The Company, they met people face-to-face and unlike other criminal justice workers, they always conducted work in people’s intimate home settings. Their work involved touching people, objects, and spaces that did not belong to them, which in a way redistributed some territorial power to those being tagged. The first sanitising ritual I observed illuminates this, particularly because it was admittedly my own ritualistic initiation during a house visit.

D faced me and stuck his hand out so I went to shake it, but when he took my hand he quickly and forcefully brought it up to his face and kissed it before I could pull it away. I was pissed off and wanted to tell him that wasn’t okay, but I also wanted to just leave so I didn’t say anything. Neither did Jack. I sat in the car for a minute while Jack stood outside and puffed on his electronic cigarette. He opened up his door and grabbed something tucked into the side of it. It was a bottle of hand sanitiser and he handed it to me. He said every Field Officer carries some with them.

(26/10/2018 field diary excerpt)

D had distracted himself during his EM induction by asking me personal questions and making comments. When he grabbed my hand for an unwelcomed kiss, it was indicative of a different power dynamic between him and I, versus him and Jack. More than just washing the residual saliva off my hand, when Jack handed me the sanitiser it was an emotive act of restoring some sense of order and taking back control. In line with Troll’s (1988) criteria for rituals, sanitiser acted as a way of maintaining a sense of continuity in a system. Field Officers used sanitiser as well but their use of sanitiser was noticeably inconsistent in that they did not use it after every single visit, but only some visits and under circumstances that carried more semiotic weight than practical reason.

As Louise and I headed out the door, F came into the hallway and said, “One more thing: I don’t seem drunk, do I?” Louise didn’t verbally answer, but shook her head to say no. We got back to the car and Louise reached into the side of the door. She squeezed hand sanitiser onto her hands. Then she went into her bag in the back and sprayed herself with perfume.

(8/11/2018 field diary excerpt)

I threw the duffel bag in the trunk but Dave actually shifted it because I accidentally set it on top of his pack of wet wipes. He told me he usually took out Car 9 but we'd be in Car 8 tonight so he didn't know what state it would be in. He told me that you never know what these folk get up to.

(14/3/2019 field diary excerpt)

Every car in The Company's fleet came with a wholesale-size bottle of sanitiser crammed into the driver's seat door. Nevertheless, most Field Officers additionally carried their own supply of gel or wipes, and in Louise's case, perfume. Although rituals are traditionally defined by repetition, these acts stood out because they were anomalies (Troll, 1988). Dave's ritual was more straightforward because he was assigned a different car than usual. He wiped down the entire interior until it was soaking wet and smelled only of lightly-scented disinfectant. Interestingly, he sanitised to avoid getting dirty from the other Field Officers that previously used the car. However, it could also be argued that Dave's interpretation of his co-workers' dirtiness stemmed from seeing the work they had to do (and people they monitored) as dirty. Louise's reasons for practicing sanitising rituals was less obvious, but demonstrated that there were certain people or places that made her feel dirty.

Whereas sanitiser (and perfume) was central to a ritual for cleaning, bathroom choice was a ritual for 'dirt avoidance' (Douglas, 1966: 36). Field Officers, particularly women, did not use the bathrooms at the homes of monitored people. Most Field Officers stopped at supermarkets between house visits to use the toilet and instructed me to do the same. Pickering and Wiseman (2019) argue that toilets are relational objects that possess material and symbolic significance. Perhaps some Field Officers were shy or embarrassed to share this aspect of their embodied life (*ibid.*). I also assumed it was an effort to not over-impose themselves on monitored people as well. However, Field Officers constructed the bathrooms of those they visited as inherently dirty, and to be avoided when possible. When a man Field Officer first explained to me how I should request to stop at a supermarket, he confessed that he occasionally used people's bathrooms during visits but unlike me, he 'didn't have to touch anything.' There was nothing spectacularly clean about supermarket bathrooms, but for Field Officers they were a value-neutral alternative to the symbolically dirty toilets of monitored people. Once again, an anomaly to the rule reinforced that using

supermarket bathrooms was a ritual of dirt avoidance, as the following excerpt illustrates a differently categorised monitored person.

As we walked down the stairs back to the car, Beth asked me if I knew who T was? I didn't. She told me she was a [public figure] and that she'd heard of the case from the news. I asked Beth if there was somewhere nearby I could stop to use the bathroom? She said sure but told me I should've went in T's house. She said she normally would go to a grocery store or something because she doesn't like using the toilets at monitored peoples' houses. They can be in a rough state sometimes, but T's house seemed fine enough.

(22/5/2019 field diary excerpt)

T was highly educated, explicitly wealthy, and represented an elite status that put her in a different category from other monitored people. She was not constructed by Beth as dirty and by extension, neither was her toilet. Whereas the use of sanitiser poignantly represented individual cases, the avoidance of almost all toilets represented a larger scale practice. Rituals can serve practical functions in addition to their symbolic functions. Sanitising one's hands or choosing 'neutral' bathrooms are otherwise pragmatic work practices. However, these rituals of cleaning or dirt-avoidance became techniques of othering, which reinforced the distinction between 'we (the clean) and they (the dirty)' (Pickering and Wiseman, 2019: 757).

The inconsistent wearing of gloves was another practice by Field Officers to avoid dirt and mitigate contagion. Gloves are a sensible choice for work that involves regularly touching other people. However, there was only one or two instances during fieldwork when an Officer wore gloves. For example, there was an instance when Jack showed me an instruction on his Field Officer list of jobs for the night.

Jack was here to refit Y's ankle strap, which Y had called and complained was too tight. He has a condition that makes his legs swell up from time to time. Jack told me that on the list of jobs on his work phone there was a special note warning any Field Officers visiting Y to wear gloves. I asked if I could see the note itself, and saw it was written in all caps, with asterisks on either side. Like: ***WEAR GLOVES***. It didn't say why gloves were needed. Was it just because his legs swelled up? I asked if Y was the one that requested the gloves, but Jack said that notes like that were by and for Field Officers. He said this task had been on the list for a while and he had avoided doing it the other night but now he had no excuse since he didn't have many jobs to complete tonight.

(26/7/2019 field diary excerpt)

Jack unquestioningly wore gloves for the duration of the visit, even though he was allergic to latex and never even touched Y's ankle in the end. One Field Officer deemed Y to be dirty/contagious, and by inscribing it into the system software, made it part of his identity. It automatically uploaded that contagion warning to his file so that Jack and any other Field Officer would know beforehand that they needed to physically protect themselves, even if they did not know what they were protecting themselves from. This demonstrates that sanitising rituals were not just part of Field Officers' casual work practices, but through the techno-managerialist system they operated through, became formalised markers. These markers then factored into the enactment of monitoring, where those inscribed in the system as dirty were avoided when possible.

These rituals of sanitation and dirt avoidance ultimately provide insight into the ways EM Officers enact their own subjectivity. This section is not about people being judgemental about other people's toilets, but rather, it comes back to the point about what it means to do monitoring work and the strange intimacies of how it gets performed by different EM Officers. These Officers spend the entire night, most nights, having to go into strangers' homes and adapt to each space anew. This carries its own set of situated risks and vulnerabilities. The previous sections have established that there is also a great deal of unrewarded emotional labour that goes into the enactment of monitoring, leaving Officers to make their own value judgements including feelings of sympathy, pity, anger, frustration, disgust, or fear. I argue these rituals are materialised technologies of the self which reinforce their own subject position and provide EM Officers with a sense of order in a job that can feel messy and disordered (Foucault, 1982, 1987). However, these findings reveal how another group of people were judged, categorised, and Othered as an effect of these practices (Douglas, 1966).

Conclusion

This chapter set out to unseat the narrative of EM as a better-alternative, automated, and clean form of punishment. The findings of this chapter primarily seek to break open the research question of how differently situated actors experienced and/or enacted EM, which speaks to the everyday negotiations, practices, and rhythms that were reconfigured by this distinct digital connection. By focusing on what it was like to be monitored and what it was like to do monitoring, it revealed the interrelations and unique intimacies between these two seemingly oppositional experiences and differently situated actors. The notion of constrained connectivity illuminates the unique temporal regime of being subject to EM,

the grip this form of penal surveillance had over people, and yet, the sanctuary and reprieve it provided to others. The curfew imposed a routine on people's lives that gave some freedom, but made others frustratingly confront it daily.

The up-close encounters between monitored people and EM Officers revealed a messy system of relations due to the out-of-sight work of Field Officers located at an important interface, as agents of penal surveillance but also empathetic (yet constrained) individuals. Their work was emotionally heavy, led to responsibilities falling unequally on women, and resulted sometimes in the harsh categorisation and characterisation of people who were constructed as socially and materially tainted by those in power (Douglas, 1966; Ashforth *et al.*, 2007). The 'dirty' business of EM was in the small discretionary powers afforded to those who do operational monitoring work, revealing that the subtle and unrecognised ways that they interpreted and performed their practice were not just personalised quirks but fundamental aspects of doing EM.

In some ways, both the monitored and the monitors were left to negotiate a variety of constrained freedoms which came to define their experiences of penal surveillance and were deeply embedded in their everyday lives and practices. In the many informal and situated stories shared by participants and written about by myself as an ethnographer, it is important to reflect on what this tells us about the optics of penal surveillance. Like a bank of Accumulated Time Violations, EM felt less like a hegemonic and totalising punishment and more like a series of small, latent, accumulated moments that gripped people in different ways (and at different times of the day/night). On the other side of the computer screen however, and through many of the processes discussed in Chapter 5, we can see how these informal moments became formalised through digital inscription and sometimes made their way into the penal surveillance database (glove warnings, etc.) but also when they were left out (omitted from breach reports). While the enactment of EM involves processes of automation, invisible human discretion is also involved in how someone is constructed and 'seen' which can deny many aspects of monitored people's identities and personhood and reproduce exclusion.

Chapter Seven: Through a glass, darkly: Power, representation, and the mystification of penal surveillance

Introduction

The two previous chapters explored and discussed relational and situated experiences within and throughout the penal surveillance network of EM in Scotland. Chapter 5 discussed the networked governance of penal surveillance and how EM operated both up close and at a distance. As penal surveillance data flowed from one site, person, or thing to the next, it produced distinct ‘hybrid’ narratives and representations of bodies, places, and actions that actively shaped the enactment of monitoring and the experience of being subject to EM (Brown, 2006). Chapter 6 delved deeper into the constraints and intimacies of both being monitored and doing monitoring and how it became embedded in the everyday. The power of penal surveillance was felt and exercised in subtle ways: the time on the clock, wakeful anxiety in the middle of the night, sitting on the couch, or wiping one’s feet at the door. The experiences of the watched and the watchers demonstrated that EM was a messy, tactile form of punishment involving both the prevailing narratives of digital systems and the complex discretionary powers of its human agents.

Building upon these findings, this final findings chapter will explore the representative, communicative, and embodied aspects of digitally mediated punishment. These findings extend out of everyday contexts and speak to broader ways of thinking about knowledge, power, and punishment. The first section explores strategic concealment, detailing the ways in which information was communicated, withheld, and aesthetically experienced by different people including monitored people, their co-residents, and staff at The Company. It reveals that information about EM was characterised by doubt, obfuscation, distortions, and defiance as opposed to the communicative clarity and certainty associated with the ideals of EM and digital systems. The second section explores the relationship between punishment and the body, including an analysis of wearable technology and embodied punishment, how small infractions accumulated through mechanisms of regulatory power, and how EM attempted to mould and recast people through normalising processes that both harmed and helped. It furthers the claim that EM was a corporeal, messy experience, in contrast to the ideals of EM as digitally detached, clear-cut, and always reliable. An analysis of the communicative, representative, and embodied lived realities of EM subverts the idealised optics of digitally mediated punishment, and instead, demonstrates that it was an incomplete, limited, and contradictory surveillance system.

1. Strategic concealment and defiance

EM involved many secrets and subversions, held or enacted by different actors within the penal surveillance network. Whereas digital surveillance could have rendered relations, processes and practices more transparent, EM remained a ‘black box’ of activity and meanings insofar as the internal complexity of relations was overlooked in favour of the seemingly clear outputs and results of breach and completion reports (Latour, 1999). There was a conscious effort to mystify penal surveillance and how different devices or order conditions worked, in order to contain and control knowledge, and in turn, those being monitored. Some people had exclusion zones, which effectively banished them from certain places or parts of town. Yet, the geographical boundaries of banishment were unclear, as were the abilities of The Company, Police, or broader justice system to enforce such orders.

In turn, there were pervasive issues around people misunderstanding how the technology worked, both technically and logistically. This led to paranoia, mistrust, and the dissemination of humorous yet rebellious stories and techniques for managing and evading penal surveillance. In order to navigate and defy being subject to digitally mediated punishment, some people engaged in digitally mediated tricks and games for playing the system, which were important and meaningful experiences for people who felt they were trapped in stagnant situations. The last part of this section explores the aesthetics of penal EM and techniques for concealing the objects and social impacts of punishment, as exercised by monitored people. For those who wished to ‘pass’ as unpunished, the secrecy and carefulness needed to conceal being monitored was more extensive than just wearing long trousers or high socks (Kanuha, 1999). The concealment of information within and outside the network was strategic and often caused confusion, particularly at the expense of those subject to this form of punishment.

1.1 The mystification of surveillance

H asks if he can use the veranda and garden during curfew to stretch his legs during his shift break in the middle of the night? Pete says no because that is something that has to be approved by the court. Plus, he tells H that the tag can detect if he’s outside not just by the perimeter boundaries, but it can somehow detect the difference between outside air and inside air. This... is a complete lie. I knew that and I think H knew that too but he didn’t push it. It was a funny thing to say, especially because Pete had mentioned on the way over that he doesn’t think people are given enough information about EM. That they don’t understand what they’ve signed up for.

(27/11/2018 field diary excerpt)

Knowledge, and in turn, power, was not equally distributed amongst actors in the EM network. Some EM Officers went to great lengths to conceal, protect, mislead, and hoard knowledge about EM, including more obvious examples such as the one above with Pete but also more subtle or softer techniques as well. In line with Foucault's (1982) work on governmentality, I argue penal surveillance was mystified as an exercise and stabilisation of power and governance over those being monitored. As active subjects, EM Officers engaged in various cultural practices of mystification. These techniques obscured the nature of penal surveillance and the ways in which it was (or was not) enforced. Officers were driven by the arguably dubious, but nonetheless enduring rationality that if monitored people knew how the technology and system worked, they would be able to subvert or circumvent the system.

Interestingly, this particular Sheriff makes a unique request for her reports from The Company. She requests technical information on the equipment so she can be informed enough to challenge monitored people about specific denials or contestations. It gets added to the back of the report. The status of connectivity quality checks, expiration dates on equipment, range sizes, etc. Theresa says it needs to be informative but not too informative otherwise the 'MPs' that request these reports, as is their right, will read it and know how to tamper or circumvent their order. Knowledge is clearly interpreted as power.

(11/10/2019 field diary excerpt)

Access to information was a frequent topic of conversation amongst interview participants. Many expressed that they had struggled to access information about EM before getting risk-assessed and approved for the tag. Although informational pamphlets existed within prisons, they were either not advertised, inaccessible, or unhelpful.

George: [...] So it was difficult to have a [sensible] conversation. But when you come out of, for example, the visiting room, you're in a little waiting room before you go back to the wing and there was a whole load of information on the wall and one of them referred to a [Home Detention Curfew] pamphlet. Can't remember the name or number of it. But I've seen this so I go back to the wing and ask. 'I noticed on the information board there's a pamphlet' – and I did know at that time what the number was – 'is there any chance I could get one? I was hoping to leaf through it.' Eventually after asking four or five times I was told it doesn't exist. So... my son went online, got the information, and posted it in when he realised I couldn't get it.

George was told the information did not even exist although he had just seen reference to it on the bulletin board. Once on the tag, some participants were not fully informed of their

curfew hours and only updated when a Field Officer visited for their induction. These were typically minor discrepancies, such as assuming one's curfew times were 7pm and 7am when it was actually 7:15 or 7:30 am/pm. Nevertheless, a 30-minute difference on either end can impact someone's routine and ability to commute home on time. Beyond temporal misunderstandings, there were doubts and misunderstandings about the type of surveillance involved in EM and what kind of data people thought was being collected about themselves. One interviewee misunderstood what type of surveillance he was subject to during his EM order and assumed he was being tracked by constant GPS surveillance. Many others suggested that they assumed the tag and/or box had far more capabilities than EM officers let on which made them feel paranoid and confused about the devices in their homes and on their bodies.

Stuart: [...] I found it hard to sleep, being tagged, as well. You know. And I always believed, this was just my paranoid mind at the time, that there was more to the tag than being tagged. I thought they could see more, this tag done more than it actually said. Do you know what I mean? It's like constantly being monitored.

Ryan: Yeah I get what you mean. At the time, what did you think the technology was capable of?

Stuart: Like, it could record. It could hear me speaking. It was just my mind at the time. It was really, really damaged with narcotics at the time. So I believed that this thing could record me and hear my conversations if I was speaking on the phone. It wisnae a nice time, you know?

These misunderstandings suggest that there is poor communication about what EM involves, who enforces it, and what someone needs to do in order to successfully complete an order. Community reintegration and being subject to supervision are already difficult experiences for most people, particularly for those also dealing with other conflicts or struggles such as addiction, poor mental health, or family disputes. When I first met Field Officer Louise and asked her about what it was like to do her job, it was these experiences that stood out to her and that she shared with me.

Louise told me that in her experience, a lot of people don't really understand how the curfews work. She shared some anecdotes, like how one guy thought he couldn't leave his house at all and remained indoors the duration of his sentence. He had told Louise that he didn't like that The Company would know where he was all the time or where he went. She reminded him that the tag he wore wasn't GPS and that what they monitored was much more limited than that, but he was suspicious and thought she was lying. Louise also told me another really young guy, 17, had once asked her how to breach. He didn't understand the conditions of EM when he first consented to it. His conviction

led to tense family relations and he didn't want to be in the house anymore; he rather be in prison.

(8/11/2018 field diary excerpt)

Mystification had consequences, perhaps most importantly, reinforcing the asymmetrical power dynamic between the monitors and the monitored. By attempting to contain knowledge, it meant certain types of information only flowed (i.e. transmitted) one-way, up-stream to the distant Monitoring Centre so monitored people were not always aware of how the system software characterised them and represented their movements. For example, the 'spatial logic' of the invisible technologically constructed range versus the physical perimeter of someone's home were very similar, yet it has already been evidenced (see Chapter 5) that there were occasional discrepancies (Troshynski *et al.*, 2008: 489). This problem of ambiguously constructed space went beyond the range signal, impacting how Omar understood the boundaries of his exclusion zone.

Omar: In fact, there was one restriction. It wasn't necessarily an order but a restriction that I couldn't go to a particular area whilst I was on the tag. They didn't define the area very well, but, even though, they said I can't go to the area. But they didn't define the area, so I then questioned. They couldn't define it on a map for me either so, again, it was just purely for my own kind of peace of mind. It's not an area I want to go into but I need to know where it is I can't go.

Ryan: Yeah, yeah. Like where the -

Omar: Boundary is. And my mother had some health issues and was not too far from the potential boundary.

Omar wanted clarity about the spaces and places he was excluded from, in order to better understand where he was both 'banished' from and in turn, welcomed into (Beckett and Herbert, 2010). However, both The Company and the Prison Service mystified the prohibition area, perhaps because it was not clearly enforceable given the limitations of radio-frequency monitoring. Despite being proactive in his own subjectivity, The Company responded by creating a 'fog' around the undefined area (Box, 1983: 12). Such actions were indicative of how the EM network attempted to control the conduct of those being monitored through the gatekeeping of knowledge and information. The mystification of surveillance perpetuated the construct of 'MPs' as suspicious, subversive, and kept in the dark. However, the next section will demonstrate the ways in which people actively resisted this technique of subjectification.

1.2 Surveillance games and enduring lore

I was introduced to tag stories, or lore, the very first time I visited the National Monitoring Centre. During that initial meeting, my gatekeeper told me about a woman who figured out how to take her box unit to the pub with her and plugged it back in behind the bar quickly, so it appeared in The Company's system as a quick dip in electricity rather than a cab ride across town. Another story involved a man in England who was fitted with a tag on a prosthetic limb, which was left behind in the house for the night as he went out and was later on charged with further offenses seemingly committed during curfew hours. In response, when Dave refitted someone with a tag one night during a ride-along, he jokingly rapped his knuckles on the man's leg to see if it was prosthetic or not and they both laughed. These stories were funny, non-threatening, fuelled light-hearted banter, and enjoyed by EM Officers and people subject to EM alike. The lore seemed quite fantastical, and yet the one about the prosthetic limb actually turned out to be true (see BBC, 2011).

These legendary stories persisted because they represented and communicated nonconformity and resistance to penal regulation and digital surveillance, particularly for those who were in fact committed to being performatively compliant, or at the very least, technically 'off the queue.' There was ingenuity involved in these stories, differentiating them from the overt acts of simply cutting the tag off or revoking consent to be monitored. Whereas the previous section demonstrated how formal information was kept from people subject to EM, this section will explore how lore constituted informal knowledge passed from person to person through overlaps and intersections in their networks of social (and digital) control. During a Denied Absence Investigation at Q's home, Q chatted about overhearing these kinds of stories and wanted to make it clear that that had not been the reason why his tag stopped working that night.

Q brought up again that he wouldn't think to mess about with the curfew because he was older now. He used to be 'a thug, a criminal' and recognised that mindset in the other young boys he saw at the [Community Payback Order] day centre. He laughed and said it made him feel old. They sit around and talk about how to hack the tags because lots of them are on it now. 'Not enough space in the prisons, eh?'

(14/3/2019 field diary excerpt)

Q observed that other people, particularly young men, subject to a variety of penal measures including EM and Community Payback Orders often converged at different sites of punishment and discussed informal 'hack[ing]' techniques. Tinfoil, loose straps, prying

it off at the ‘secret’ angle, high-rise staircases, fitting it on the dog, and extension cables were just some of the suggestions heard during fieldwork. The accuracy and feasibility of these techniques were debateable; a combination of what Paterson (2007: 320) describes as ‘truth, bravado, and local legend.’ In fact, many were founded on misconceptions of how the surveillance technology worked. For example, putting the tag on a dog was supposedly one of the most popular techniques for evading EM, yet it was based on the notion that movement within the range or having the tag attached to a physical body (human or otherwise) was a significant aspect of penal surveillance. However, during the time of fieldwork, the tag only measured movement passing through the range and, while the fibre-optic wire running through the strap could detect tampering if the tag was aggressively pulled or cut it could not detect whether or not it was on a body. One interview participant mentioned that his friend cut off and buried her tag in the ground to evade being found, although the tags used in Scotland at the time would not have been capable of location-tracking anyways. Lore was important not because it was accurate, but rather, because it was a demonstration of small acts of defiance and a need for ‘space to escape’ (McCahill, 2002: 83).

These digital escape attempts were sites of action, characterised by light-heartedness but also chanciness (Goffman, 1969). Drawing upon McDermott and King (1988), and more recently, Liebling *et al.*’s (2020) work on penological game-play, I argue that different network actors, particularly the monitors and those being monitored, played tactical games with each other in order to negotiate the dynamic between constraint and transgression. For example, when Dave knocked on a man’s shin during his induction, he was on one hand making a joke and fostering connection during what could be an intimate and awkward moment. Yet, he also drew the man into a game of maintaining control and authority where the lore of the prosthetic leg was openly acknowledged and countered against by checking the fleshiness of the man’s leg (McDermott and King, 1988). Similarly, when Rob’s release date for HDC was delayed, he wrote a complaint to the Prison Service. After the original complaint received no response and the standard response window lapsed, he then filed a complaint against the complaint system, entangling himself in a ‘battle of paperwork’ that nevertheless gave him a sense of agency in what felt like a stagnant and powerless situation (Liebling *et al.*, 2020: 10). For some participants, these were tactical games filled with moves and countermoves as monitored people and EM Officers manoeuvred around each other in order to maintain autonomy, control, or both.

Stuart: They had to check that I wasn't able to leave and go up to a neighbour's or... cause in the early days, people could do that. Like if you lived in a high-rise flat, you could usually go up the stairs or down the stairs, you know?

Ryan: Oh right, right. And that one time they came over because of the fireworks, was that the only time you interacted with them?

Stuart: No, no. There was random spot checks, random checks where they would come to your house. Because although you're electronically tagged, I daresay, anything could be manipulated. You know? You could – I daresay if someone was clever enough, they could find a way around it, you know?

Stuart found a satisfying comfort in knowing that what felt like overly precautionary measures were likely the consequence of another person who outsmarted the system before him. When Field Officers paid him unannounced visits or tested access to the staircase, Stuart interpreted these as tactical countermoves. Surveillance games were present acts of resistance but also had historical and communal significance as well, uniting people with a common experience, but who were remotely located and estranged from one another. Underneath the playfulness of these stories, it became evident that there was a much deeper, informal understanding of penal surveillance technology being communicated as well as a brief reversal or subversion of the optics of penal surveillance. This is in line with understandings of 'sousveillance,' in which agency is interpreted as a form of 'reflectionism' as technologies of surveillance and social control are satirically reappropriated by those under its gaze (Gangeux, 2014: 446).

The kind of surveillance enacted by The Company was only capable of monitoring the digital, external demonstrations of compliance that were transmitted and quantifiable from afar; the datafied penal avatar (see Chapter 5). Whereas these different forms of embodiment, corporeal and digital, were typically intertwined as a socio-material assemblage, tactical game-play presented the possibility of defiantly severing the two while maintaining the façade of compliance. These digital escape attempts re-appropriated the limited optics of EM into performances of agency and resistance. The following section will delve further into the complex relationship of embodiment and representation by exploring the material and symbolic effects of being monitored and how the aesthetics of penal surveillance had communicative value.

1.3 The aesthetics of passing

Omar: It's very different. And being able to step out and just looking at people and wondering, 'Is that person looking at me because they know I've just been released from prison or have they seen my tag?' It does take a while to sort your mental health out. So, I think it was important for me just to sort my head out, get myself back into it, and find a way to provide for my family. Just a normal way of life. Of course, I say 'normal' but what other individuals think of as normal maybe isn't the same as mine. But once you've come out of prison, normal is very different.

A wide range of related studies have acknowledged the potentially stigmatising effects of bearing the mark of being subject to penal monitoring, even going as far as to call it a 'scarlet letter' of spoiled identity (Murphy *et al.*, 2011; see also Nellis, 2013; Graham and McIvor, 2015; Gacek, 2018; Kilgour, 2020). Drawing upon Goffman's (1963) notion of 'stigma,' I argue that monitored people were impacted by both the material, bodily signifier of wearing the tag as well as the information it externally signified to others. The objects used for penal surveillance were visual symbols of one's moral status and (techno-) social location; wearing a tag and having the box unit installed in the house communicated that that person was 'ritually polluted,' under a penal gaze, and marked as different (Goffman, 1963: 1). People subject to EM concealed these visual symbols through techniques and performances in self-representation: 'passing' as unmarked, unpolluted, or unpunished; clothing choices; cancelling late-night plans; some even evaded social interactions entirely by self-isolating in their residences (Kanuha, 1999). In line with Kilgour's (2020) recent analysis of the visual politics of EM devices, tags caused stigma and embarrassment often just because of the alienating shapes and sizes of the material devices. The devices were chunky, old, and not always easy to camouflage.

Ryan: And how did you find the tag, in the beginning or throughout your order?

Omar: You're very conscious of it. I started wearing kind of slightly looser trousers to make sure it's covered, slightly longer socks to make sure it's covered. If I was out and about, I was very conscious of how I would sit to make sure it wasn't visible in any way, so yeah. You are very conscious if you're out and about. [...] So, if it could be made smaller, then that's a bonus. Cause it is quite chunky. You've probably seen it?

The tag was a chunky, fitted anklet that Omar tried to conceal with clothing and posture for fear of others seeing that he was marked, which would reveal that he had been subject to state punishment and social control. He was able to easily adjust his clothing style to accommodate this, reinforcing the climate and gender-specific ways that EM

can be experienced differently. The cooler, temperate climate of Scotland made it easy to conceal the tag with long, loose trousers and long socks. However, it also reinforced the notion of EM as a punishment ‘designed for men’ since a body of research has shown women have to work harder and make more changes in their lives than men in order to conceal being tagged (Holdsworth and Hucklesby, 2014; Holdsworth, 2015). The findings from this study cannot make claims about the distinct experiences of being monitored as a woman due to sampling limitations, but the ways in which it was easy for men to conceal being tagged through fashion and comportment suggests important gender differences.

Omar took meaningful steps to conceal the device because only a few people in his life knew he had spent six months in prison and another six months subject to EM. He not only concealed the penal artefact, but the entire punishment experience so that his extended family, friends, and employers thought he had just been on a long business trip or informal family leave. This was sensitive information that typically would only be discovered through background checks, disclosure, and criminal records, but which, for Omar, could be revealed by the way he sat in a chair. Kilgour (2020) argues the visual form and material qualities of the device can be a threat to one’s privacy for this reason since the device alone can signal to other people that someone has a conviction or is justice-involved.

Field Officers made an effort to conceal themselves as agents of penal surveillance by driving unmarked cars and wearing unmarked clothes, yet the devices needed to monitor people were not designed with the same sentiment in mind. The box was a large unit, similar in size to an older video game console with a coiled telephone handset attached. Not only did it look out of place in terms of appearing far more outdated than the other electronic devices people had in their homes, but it had to be positioned out of place as well. Across the many EM inductions I observed, nearly every person requested that the box be positioned amongst the DVD player, WiFi router, and other similarly shaped devices tucked into the TV stand so it would be camouflaged. However, Field Officers could not allow this because the signal from those devices interfered with the box. It had to be positioned somewhere more prominent, central and isolated from the others so it could ‘see’ signal and connectivity. This meant it was on display not just for the person being monitored, but their co-residents and anyone else that came over to visit.

Rob: My wife didnae want anyone coming over to visit. Cause the box was sitting there and it was a pure embarrassment. ‘It’s a phone, it’s not an embarrassment.’ ‘It’s not a phone it’s a fucking box.’ ‘Aye, okay.’ The aesthetics are a bit.... It was just that whole punishment she was embarrassed about it all. Whereas I wisnae that bothered with it. The tag, very unobtrusive, fits on your ankle, naebody sees it unless you pull your trooser leg up to show them. First couple of days, if you’re oot wearing it, you are very self-conscious. You think everybody’s looking at it, everybody can see it, oh my god. Naw, you don’t. You don’t see it at all.

Beyond the ankle-worn device then, being monitored also involved the installation of bulky equipment in the home, which was a constant reminder that there was a penal gaze upon their home, not just for the person subject to EM but co-residents as well. Rob’s perspective on the aesthetics of EM interestingly highlighted not just the artefacts of monitoring which included both the tag and the box, but how this impacted his relations with his wife and his wife’s relations with others. In the same spirit as Rob’s wife’s argument, while the box looked somewhat innocuous, it was not. The device was of a different nature from that of a phone. In Chapter 5, I discussed how the alerts emanating from the box unit were a form of literal and symbolic noise pollution, or ‘sound out of place’ (Pickering and Rice, 2017). In taking this argument further, the aesthetics and function of the box became part of the punishment experience too. The device was highly visible because of where it had to be located, reminding Rob’s wife that her home was marked as different. She concealed this by not having guests over for the duration of Rob’s order. The bulky, dated aesthetic of the device was arguably part of the punishment experience and something other scholars (see Lilly and Nellis, 2013; Renzema, 2013) have debated as deliberately punitive, given that the basic structural design of EM devices have not changed over the past 40 years, amidst rapid, global technological advancements elsewhere (Kilgour, 2020).

It is important to note that not everybody felt stigmatised by being tagged or attempted to conceal the experience from others. For some participants, EM was a common occurrence for their friendship group, family, or for people in their community which might have made them feel they were marked as belonging rather than as different.

Stuart: Yeah. Where I lived at the time – a lot of criminals live in [the neighbourhood]. A lot of people who were in and out of prison, so my neighbours didn’t judge me. At no time did I feel stigma for being on a tag. Just because it’s one of they working class communities where everybody’s got a relative who’s always in prison, do you know what I mean?

Stuart's experience highlights the multiplicities of people's experiences of punishment. Community and class identity played a role in his penal subjectivity, which in his case meant that because he lived in an intensely policed community and those around him were already socialised to criminal justice processes, surveillance, and contact, he did not experience judgement (Sexton, 2015). Some people conveyed that the tag was a rebellious mark of prestige. During B's induction, I heard the artificial shutter of a camera phone go off just after he had been fitted with the tag and saw from his phone screen that he had sent a picture of his new anklet to a group chat with his friends, in addition to the ones witnessing his induction from downstairs where he was hosting a party. Perhaps it was bravado, or perhaps he resisted the marker of a 'spoiled identity' by embracing it. However, this again should be interpreted as a gendered experience. Previous research has argued that while being subject to punishment can be transformed into a socially inclusive and relational experience for men, it more likely has the opposite effect for women (see Malloch and McIvor, 2011).

Being mandated to wear a digital device on one's ankle, have a box unit strategically installed in the home, and a flow of information about you transmitted to a distant database and calculation centre involved a significant array of embodied experiences and relations. For monitored people, the embodied and material experiences of being tagged were significant and most were left to negotiate the stigma of visibility. People like Omar and Rob used techniques in order to pass as unmonitored, non-stigmatised members of society for the appearance of others, although it was evident it affected them personally. For example, although Rob brushed off the notion that the tag was obtrusive and insisted that people did not see it, he later confided that he refused to leave the house for several days out of fear that people would 'point fingers and look at [him].' We also see that class, community, and personal networks played an important role in constructing the subjective experiences of punishment felt by monitored people.

2. Mould, mesh, and flesh: The bodily situatedness of digital punishment

The previous section covered findings and discussions around concealment, control/regulation of knowledge, and acts of resistance and subversion by different actors within the penal surveillance network. Particularly the last section demonstrated that there was an important relationship between the body and technology. This next section will dig deeper into issues around the body, the integration of technology into disciplinary and

social control mechanisms exercised over the body, and how monitored people navigated their social location and sense of belonging during and after their punishment experiences. EM was an embodied experience. The corporeal body became connected to a digital network, a site for regulation and control, and then the social body was subject to normalising judgements about actions, labour, and lifestyles (Foucault, 1977).

2.1. The re-embodiment of punishment

The phenomenon of disappearing bodies is examined in both criminological and critical surveillance studies subject areas as a consequence of governance from a distance (see Lyon, 2001; Garland, 2011). The significance of someone's abstracted data-self has already been discussed in Chapter 5 as an example of how The Company both extended out, and in some ways constrained in, the range of human actions to include what could be digitally captured and quantified through the surveillance network. While circulating digitised information was highly visible throughout the network, the embodied person it concerned was hidden and tucked away in favour of the tidy appearance of database profiles and colour-coded events on a screen. Garland (2011) has similarly argued that physical punishments, namely, capital punishment in the US, have undergone a superficial 'civilising' process so that it is constructed as clinical, controlled, and clean.

While capital punishment is a leap from EM, I first argue that EM should be conceptualised as physical punishment. Secondly, I argue that there is a similar false image of EM as clinical and exacting, behind which lies a profoundly dirty, messy, and embodied experience. The tag is a material and metaphorical symbol of power and the physical body is the anatomical focus of that power (Douglas, 1966). EM was enacted on the body; 'fixed in place by design' with corporeal and practical implications for people subject to penal monitoring (Troshynski *et al.*, 2008: 492). This section will go beyond abstract representations of EM as a restriction of liberty, and instead, explore the 'fleshy situatedness' of being tagged as a relationship between the body and technology (Mol and Law, 2004: 43). In the following excerpt, I had been out on a ride-along with Dave and we had stopped at P's house in order to pick up his equipment (deinstallation visit) since he had completed his order that morning. Dave asked him where the tag was that P had cut off earlier in the day:

P pointed to the corner of the room behind me, so since I was right there and had just looked back at it, I decided to just grab the tag myself. I'd felt plenty of 'fresh' tags and straps before, but never a used, worn one. It felt different.

The inside of the strap felt almost gritty, and the sand-like feeling rubbed off onto my fingers. It was sweat, or P's old sweat that had crystallised. I knew I'd just clean my hands once Pete and I got back to the car so I didn't say anything but this made me realise how close the tag was to skin. It basically *became* skin, sweaty and everything. And now it was in my hand, like a shedding.

(14/3/2019 field diary excerpt)

The sensory experience of grabbing P's discarded tag was a revelatory moment in which pre-conceived distinctions between natural and manmade, organic and inorganic, and subject and object no longer described the relationship between the body and tag (Lash, 2002; Brown, 2006). The technology was coupled to the body in a tactile, intimate way. It latched onto the body, as an expression of handsy, invasive power (Synnott, 1993). Yet, the tag was also materially fragile and required monitored people to alter their everyday, mundane actions in order to accommodate its form and function. Field Officers occasionally offered advice to monitored people on how to accommodate the device into basic activities:

He noticed that his new strap was a little loose, and Jack told him it's something he personally does for people (perhaps against protocol?) so they can rotate the grey bit around to make it more comfortable. Jack knew that at night, it was uncomfortable to sleep on your side because the grey bit would press into your ankle bone; he had to wear a tag himself for a week as part of his staff training. The two began discussing various sleep positions and even acted out how they'd look.

(26/10/18 field diary excerpt)

An act as basic as sleeping had to be adjusted, otherwise one could suffer physical discomfort caused by EM, or more seriously endanger the device leading to a potential tamper or situation where one was inaccurately recorded as out of range. The latter had happened to M, who had to have his range readjusted after he was accused of being absent and it was discovered that he just slept in a position that was not agreeable with penal surveillance technology. Similar issues occurred with water exposure, which impacted the simple act of taking a bath or shower and peoples' hygiene routines, demonstrating one of the ways in which EM technology acted upon the body and manipulated behaviours and gestures (Foucault, 1977). Nevertheless, some participants maintained harmonious relations between technology and the body.

Rob: After a while, even the short time I was on it, you get used tae it. It was just something that was there. It's a bit of a pain, cause it's always there but it

just becomes part of you almost and you don't think about it. Same way you don't think about where your head was when you're walking along the street.

Rob expressed that the tag was something he got used to over time, yet the way he made sense of it aligns with Mol and Law's (2004) argument that bodies are enacted. As much as bodies are something we have, Mol and Law (2004: 46- 47) argue bodies are also what we *do* as enacted through our daily practices. Rob's way of knowing penal technology was through his daily occurrences and things he did. He constructed his body as an assembled subject, constituted by actions, feelings, thoughts, and experiences, including the tag. This 'mode of knowing' (*ibid.*) provides rich insight into the ways technology can fuse to the body (or perhaps vice versa) as an 'actant body' where the tag becomes incorporated as part of Rob and felt as organic as his head (Brown, 2006: 231).

Other participants expressed less than harmonious feelings towards technology and the body, which I argue also stems from this notion of the body as something that is enacted (Mol and Law, 2004). Unable to shower, bathe, or sleep as one would like reveals that the ideal 'MP' as constructed by The Company, was a static, homogenous representation of monitored people; EM technology was not designed for the dynamic, lived, enacted body. Monitored people were not just people being monitored, but also people who slept, swam, bathed, gained/lost weight, exercised, had sex, took drugs, fell in love, got injured, caught colds, or had babies. Yet, the tag and the rest of The Company were not flexible enough to move with these bodily experiences and this caused tension in the body-technology relationship.

Matt: Me ankles – I had a motorbike accident when I was younger so they would swell at times, just like walking during the day. Whilst I was in prison I didn't really think of it but when I'd been out walking, me ankles, when I'd come home they'd swell up. So I'd call [The Company] up and I'd say, 'Look, it's swollen and it's really tight.' And they'd say, 'Well, it's tough.' You know? 'We can't get somebody to come out and adjust it.' So I would phone the doctors. One time, my foot was going blue and I phoned the emergency doctor and I said, 'Look I can't come to the emergency doctor in [town] cause I've got a tag. But the tag's quite tight.' So they came to see me and they phoned [The Company] up like, 'Look, you're gonna have to come out and loosen this up or do something.' So they came out but when they came out they were really, really aggressive and like, 'Listen, if we have to make this loosely, we'll just breach ye. We'll just send you back.' So then it was like, I don't want to go walking cause I don't want this swelling up and the pain. You know? [...] I would just sit and watch TV or just be in my house. I just became lazy. I put on a lot of weight cause I'd just eat takeaways and... you weren't going out. You were just sitting in constantly so I did put on a lot of weight and like I said, there was three of us in the marriage at that point. There was me, the wife, and the tag. It was... even in bed at nights, even simple things like her

leg on my leg I'd freak out like 'Woah, woah, woah, stay away from my tag' and I would sleep with socks over it and things like that in case I broke it. And you were constantly paranoid [*laughs*], so... [*laughs*]....

Penal surveillance technology squeezed Matt until his foot turned blue. The corporeal grip of the tag gave way to an equally oppressive mental 'grip' that impacted his health, activities, relationships, and threatened his perceived order compliance. EM enacted power over the flesh and body. When the tag was metaphorically 'out of place,' it physically itched, scratched, prevented sleep, squeezed, chaffed, felt 'pure slimey' (J) or got dusty (Douglas, 1966: 36). When I met Q during a denied absence visit, he demonstrated the lengths he went to in order to avoid the tag touching his skin because it caused irritation, including wearing both leggings and socks tucked underneath the tag strap. It is worth noting how this technique diverts from those who strategically wore socks over the tag to hide that they were subject to EM. Another participant similarly confided (in a hushed tone) that he had to use Canesten medicated cream (aptly used to treat 'intimate' skin conditions) to soothe the rashy irritation caused by wearing a tag.

In exploring the fleshy situatedness of electronic monitoring, it becomes apparent that being tagged was an intimate, tactile, and frictional experience. While the physically worn device is symbolically loaded, there is also a very immediate corporal dimension to wearing punishment. Some participants expressed how the tag became part of their body, the way they moved about the world, or even part of their marriages (for better or worse). This reinforces the ways in which penal power can still be physical and how EM was in fact an exercise in power over the body (Synnott, 1993; Foucault, 1977).

2.2 The mechanics and maintenance of control

Penal surveillance devices fused, moulded, and latched to the body in different ways. There was an important symbolic and corporeal transformation experienced when someone was tagged, and while this alone sheds light on some of the mechanics of power involved in the penal surveillance network, it does not end there. EM was configured in a way that operated on a hidden system of 'micro-penalties' that acted like building blocks, aimed at controlling and disciplining the body, behaviours, movements, activities, and one's progress through the criminal justice system (Foucault, 1977: 178). These micro-penalties were used to control a particular sub-group of monitored people: those who were neither consistently meeting the requirements of their order nor unruly enough to justify a recall/revocation. These people remained perpetually under supervision, entangled in an

‘economy of suspended rights’ or as I will refer to them, penal add-ons, that on their own were minor inconveniences, but when accumulated, significantly impacted peoples’ daily lives (Foucault, 1977: 11). Penal add-ons were added to EM orders, but EM was also a penal add-on tacked onto other community supervision orders too. When I met N during a ride-along shift, he was being ordered to EM as a reprimand for not fully complying with his Community Payback Order (another community sentence).

Dave went to phone the office again, and I asked N what he was going to do with the couple of hours he had left before 9:30? He said he was going to hang out with his friend downstairs, but nothing too crazy because he had community service in the morning. He was banned from driving as well for a few more months and said it’s been hard, all of this. ‘It’s little things that add up to a bigger thing.’

(14/3/2019 field diary excerpt)

Minor inconveniences piled onto one another for N, until it added up to a more intense ‘witch’s brew’ of conditions, exclusions, and demands (Renzema, 2013a: 254). He had to complete unpaid work but was then hindered by having to rely on the bus to get there since he was banned from driving. On top of that, the EM curfew would further restrict N by determining what time he was allowed to leave the house in the morning in order to make the bus, in order to get to his unpaid work placement on time. Micro-penalties were disciplinary, but they also exemplify the perpetually shifting goalposts characteristic of Deleuze’s (1992) control society.

Beyond the addition of adjunctive conditions, the addition of time (elongation of order length) was a significant and often concealed penal add-on. One way an EM order was elongated was through a simple contract renewal. Field Officers would visit some monitored people for what was aptly referred to as a ‘SAD visit.’ Once the Standard Agreement Declaration was signed, it renewed the EM order and conveniently allowed The Company to continue monitoring that person without having to redo the induction and range setting process. In other instances, time was not added by renewal, but through the serving of consecutive (as opposed to concurrent) orders. On paper, Lewis was subject to two separate 12 month EM orders from the ages of 13 - 15, but for him it felt like 2 continuous years with a week’s break.

Ryan: Yeah. How was it getting it for the second time, knowing what it was like already?

Lewis: Well I'd just come aff it. I only came aff it fae a week.

Ryan: Oh...

Lewis: And I got a tag straight after it.

Ryan: So just a week in-between?

Lewis: [...] I just remember going back on it on the Monday, basically. I'd just gotten aff it, like the Monday before that. So I only had a week aff it and back to a year again.

In line with Cohen's (1979) notion of 'thinning the mesh,' Lewis and others that experienced similar penal add-ons became entangled in a much more complicated network of punishment. Under the guise of diversions, alternatives, and second chances, they managed to avoid prison, but at the same time opened themselves up to hidden micro-penalties that were not originally part of the order and pervaded their lives in different but nonetheless significant ways.

The breach system itself was indicative of how complicated the mechanics of penal surveillance power were. Whereas many people assumed getting breached was synonymous with revocation or getting recalled to prison, the system of breaching monitored people involved its own economy of penalties characterised by discretionary judgements and inconsistent severity of responses. Breach thresholds varied based on: conviction, age, Sheriff, geographical area, etc. However, in theory, the first reprimand technique was a letter mailed to the residence of a monitored person as a warning. These letters were received if you were nearing your accumulated time violation (ATV) threshold, if you had a long single absence, if the power source alternated between electricity and battery too much, or if there were other reasons that merited a minor reprimand but did not meet the requirements of a formal breach.

Breaches themselves were categorised by different levels based on the transgression, length of the time violation, or sentencing authority. For example, Level 1 was the highest-level breach and was levied against people recorded as absent for their entire curfew, damaging/tampering with equipment, or who missed their induction visit. While many people who were less familiar with the breach system assumed a single breach led to being recalled to prison, breach reports documented that some people had accumulated two, three, or sometimes four previous breaches. The Company and criminal justice system more broadly used this system of micro-penalties to maintain control over people through

the myriad ways they could formally reprimand them and the appearance of offering second chances.

Although some monitored people were late and recorded as so by the system software, some latenesses/absences (under a certain time threshold known as the ‘grace period’) were not incorporated into the accumulated time violation. This was previously discussed in Chapter 5, but it is worth returning to in order to consider the strangeness of being verbally punished but not technically punished. Monitoring Officers perfunctorily went through the motions of reprimanding monitored people and telling them the time counted against them anyways even when it did not. This odd practice revealed something significant about the disciplinary gaze of EM. Even though people who fell within the grace period were not quantifiably punished, Monitoring Officers had to let them know they were watching nonetheless and made them believe they were in fact being punished.

The configuration of EM surveillance was ‘asymmetric,’ so that monitored people had no access to their ongoing accumulated time violation, whether or not their name appeared in the queue at the National Monitoring Centre, nor were they made aware that a grace period existed (Troshynski *et al.*, 2008: 492). Certain techniques of mystification that have already been discussed in this chapter also highlight similar asymmetries of EM. This resonates with Foucault’s (1977) traditional description of Bentham’s panopticon, to an extent, where the prisoner is always seen but does not reciprocally see the guard in the watchtower. Yet, while prison and EM both involve one-way surveillance configurations, the digitally mediated nature of EM and the different corporeal experience of being tagged versus being incarcerated meant that the nature of visibility was different. It was not the corporeal monitored person that was visible to the Monitoring Officers, but rather, a digital shadow or avatar that transmitted some data about the person but left out much more. EM was not constant, nor all-seeing, and whereas the asymmetry of prison surveillance only benefitted the watchtower guards, monitored people found ways to benefit from and resist against the asymmetry of the penal gaze they were under. The mechanisms of power identified across the EM network did not induce discipline and docility in all of those they monitored, but the configurations of penal monitoring became a ‘self-deforming cast’ for certain people, who became entangled in the hidden economies of micro-penalties and penal add-ons (Deleuze, 1992: 4).

2.3. Still buffering...

The two previous sections explored some of the different ways being tagged was a corporeal, messy experience rather than the straightforward, neutral, and detached system it appeared as from afar. Mechanisms of disciplinary power did not produce docility, but the ‘mesh-thinning’ quality of EM orders significantly impacted the lives of participants (Cohen, 1979). This section will further explore the unusual ‘conditional’ citizenship of being tagged, the normalising features of EM that sought to mould or reform populations, and how social reintegration felt less like a warm reception and more like an impenetrable, external process that sometimes failed (Vaughan, 2000; McNeill, 2020). This involves reflecting on not just the period of being monitored, but also the aftermath of an EM order and its impact on the social and digital mobilities of its subjects. Central to this notion is that social positioning significantly impacted how people experienced the normalising, moulding effects of being subject to EM and what external demands, or ‘rites of passage,’ had to be endured in order to restore full citizenship (if, indeed, that was possible at all) (Douglas, 1966: 97).

I have already shown how the body-technology associations of being monitored produced peculiar effects, that monitored people subjected themselves to the distinct regime and routine of EM, and that the curfew produced a new temporal order. Racing to get home in time because of unpredictable work issues or transportation delays were quite common, particularly based on the incoming calls that came into the Monitoring Centre. In fact, work and employment was a significant theme throughout fieldwork, both across participant observation and interview discussions. Working represented a return to ‘normality’ for those punished for the first time, fed into the performative aspects of fatherhood and being a provider for many of the men interviewed, or factored into many other people’s self-formed rehabilitation/reintegration narratives. Work was also thematically important because it was closely associated with the relative benefits and privileges of being subject to EM as opposed to other community or custodial sentences (see Scottish Government, 2019).

Yet, the nature of constrained connectivity and ways in which it reconfigured everyday life, including the restrictive temporal regime of curfew, often meant it was a barrier for people to get or maintain employment as well as incredibly inflexible for those that managed to maintain work. For example, I met H during fieldwork who worked from home, but throughout the night during curfew. He worked during confinement hours and

slept through non-confinement hours, which meant he rarely left the house and was constantly visited by Field Officers for perfunctory welfare checks every 3 days since the Court refused to change his EM regime to accommodate his job. The nature of work Cyrus took on as a self-employed tradesperson meant that the time on each job was unpredictable, plus the fact that he did not disclose to clients that he was tagged and needed to be home at a certain time meant he sometimes got home late because he had to stay and finish a job.

These instances demonstrated that some monitored people were constrained by the ways in which penal surveillance technologies attempted to recast and remould their lives. Three interview participants reported that they either lost work because of EM or waited until their order was over before seeking employment because EM was too rigid.

George: I had to wait until the tag was removed to really do this. Because the flexibility of working wasn't there. Cause I'm not a 9 to 5 type person – never have been – just go and do whatever, go with the flow. I couldn't when I came out of prison. The contracts I had in place... there were two or three of them. I think, had I been able to go to London, to Manchester, to see them, I could've maintained a portion of them moving into this year and next. But I couldn't go. I know they would've expected me to go and make the effort to actually see them and say to them, 'this is what's happened.' They knew what happened cause I was fairly open with them. 'But this is what I'm doing.' I couldn't do it. I had conversations with the prison and requested if there was a chance they could relax? 'Could it go eight to eight? Could it go two days without so I could - and I could submit a diary – so look this is where I'm going, this is who I'm seeing, blah, blah, blah. This is why I need it.' That prevented me from maintaining or holding onto that work. So that just goes. And it costs me thousands. More. Just taking the opportunity away from me.

George, as well as another couple of participants, were in seemingly privileged socio-economic positions that did not conform to the anachronistic notion of work perpetuated by the penal surveillance network. However, the same could be argued for people who did shift-work, relied on jobs that did on-call scheduling, or any work that required overnight travel. The curfew perpetuated a very specific, out-dated, and class-based notion of labour that did not work for most people; one that moulded the body through routine and controlled a population of people through regulating and filtering acceptable versus unacceptable forms of work (Foucault, 1977).

This normalising process was against the backdrop of the difficulties already faced by people with convictions in terms of job prospects. It is well-established that people with convictions have a harder time finding employment and that there is an important

relationship between employment opportunities and justice involvement, contributing to social stratification, further marginalisation, and conditional citizenship (see Brayne, 2014; Piacentini *et al.*, 2018; McNeill, 2020). There were social and legal barriers that prevented many monitored people from maintaining or gaining work. Disclosing information about a conviction was a risk, but often a necessary part of finding work.

Rob: Last job interview I went for and the job I have at the moment, I disclosed voluntarily. No one asked me about it. ‘Also, I want to let you know I’ve been tae jail.’ ‘Why?’ ‘Circumstances.’ ‘When was it?’ ‘Six years ago.’ ‘Forget it, I’m no bothered.’ And I thought, I like this guy. I wouldnae mind daen this job wae him. Not expecting to get it once you disclose, but hey, strange things happen. Sometimes for the good.

Rob was sceptical of his prospects but volunteered this information about himself because he knew a background check was likely; the penal surveillance network would follow him to the interview room and workforce. Nevertheless, he successfully got the job despite being ‘in the system.’ The proliferation of surveillance in late modern societies, particularly criminal justice surveillance, makes it very difficult to evade disclosure (Brayne, 2014). Yet, Omar demonstrated that evading disclosure was difficult but not impossible. However, it came with its own set of consequences.

Omar: My only ultimate goal was just to get back into work and be a normal member of society, contributing, you know, taxes and everything else. But being on [a Home Detention Curfew] completely prevented me so I just took a job in [the city] during normal office hours on a significantly less salary that I would’ve been able to do and what would’ve been better suited to my skills and experience. So hugely, hugely frustrating. So as soon as I came off the tag I lined up some interviews and quite quickly able to go back into what I wanted to do. I say quite quickly, I mean reasonably quickly for the job market at the time. At that point you’re questioned on the gap on your CV. ‘What were you doing this period of time?’ Of course you don’t want to mention you’ve been in prison. But it was just a case of saying ‘taking a break,’ was my excuse. [...] Thankfully, the job I’m in just now didn’t ask for disclosure or background checks which means that I probably will stay with the company I’m working for just now until my rehabilitation period is over.

This is in line with Brayne’s (2014) concept of ‘system avoidance’ which argues that people who have been in contact with criminal justice systems can find ways to avoid contact with surveillance institutions and formal records, but often at the expense of citizenship. The original concept argues this can further marginalise people by rendering them financially vulnerable, socially immobile, and/or without proper healthcare (*ibid.*). Yet, Omar’s ability to avoid the system came from a place of relative privilege, an established business network and reputation, and a social positioning that was elite enough

to side-step disclosure protocols. While he was able to avoid certain information being found out, it trapped him in that particular job until his convictions are completely spent.

The partial citizenship that goes with being subject to EM was experienced differently by a heterogeneous group of participants. Beyond work and employment, there were other social barriers that buffered the (re)integrative process. EM offered the opportunity to be back in the community and return to work and family, but these so-called privileges were not always welcomed. For example, not every community received people back warmly. Two interview participants were informally chased out or banished from their villages and communities after being arrested or imprisoned and released on a tag. Due to a fight between him and another man he had been co-accused with, Matt was perceived by his community as a 'grass' and also received hostility due to the nature of his conviction. After he was released on bail, his wife and children were spat on by a neighbour and ostracised from the community where they had lived for years. His family decided to move to England in order to avoid further altercations. Cyrus similarly moved away from his small village after local businesses and services began to refuse him service because of his conviction as well as dealing with divorce proceedings with his ex-spouse. After getting into fights with other locals and how fraught it made his family relationships, he decided he had to leave and move to a bigger city.

These experiences disrupt the idealisation of communities as always being sites and networks of solidarity and opportunity (Day, 2006). EM was predicated on the illusion of an always-forgiving community, but it is clear that communities can hurt as much as they can help. Social (re)integration was like a 'rite of passage' (Douglas, 1966: 97) that was sometimes harmonious, but other times degrading (McNeill, 2020). Such rites of passage came not just from informal communities and networks, but from the procedures of the state and rehabilitation system as well. These external processes of reformation sometimes caused harm by constraining citizenship and holding people back.

Omar: So I'm in this kind of buffer period, which is called the rehabilitation period. I mean, while it's all rehabilitation I like to call it self-rehabilitation because I have no involvement in police, prison, social work, community justice, or any other authority. So I'm essentially left to myself. No psychologists, mental health support, nothing. It's just all down to me. Now, if I'm trusted to be out in the community and trusted to be just kind of a normal member of society, why should I still have to declare my conviction?

Omar expressed that he felt socially out of place due to the rites of passage he endured as part of the formal rehabilitation process. Drawing upon the corridor imaginary and idea of the threshold (see Douglas, 1966), it is evident Omar felt trapped in a grey zone, like a hallway, and unable to cross the thresholds of any doors in view. He was buffered from full (re)integration and citizenship, waiting for a transition rite that felt completely external to him rather than something he himself could enact. The regulatory governance of rehabilitation and the transitory, yet elongated experience of the buffer period meant that even though he felt he ‘reformed’ in his own way, the state did not recognise how Omar saw himself (McNeill, 2019a). Being seen as still in-progress, Omar has to wait for this strange, external recognition of being reformed and until then, continue to be buffered by the system meant to help him.

Conclusion

This chapter set out to explore the communicative, representational, and bodily aspects of digitally mediated punishment, and in this way, make visible the hidden ways that EM changes penal supervision. These findings extend out of everyday contexts and speak to broader ways of thinking about knowledge, power, and punishment. The ways in which information and communicative dimensions of EM were strategically concealed reveals the importance of power that comes with knowing. Latour (1999: 304) and Callon (1986: 29) identify the hiding process as an act of ‘blackboxing’ which obscures and makes invisible the internal practices and infrastructures of systems so that our understandings of them are simplified. The first section of this chapter demonstrated some of the ways this happens through techniques of mystification, the continuance of lore, and the aesthetics of passing. While EM Officers often exercised power by obscuring their practices and general information about EM from monitored people, it was also clear that monitored people responded by playing tactical surveillance games and sharing lore about the limits of penal surveillance.

Linked to this, there were several important intersections between the communicative and representative dimensions of EM and the prominence of the corporeal body. EM was punishment worn on the body. This meant that many people felt the stigmatising effects of having to wear (and hide) this chunky piece of outdated equipment. Exploring this further also revealed that other pieces of hardware and criminal justice involvement more broadly were also sources of embarrassment and shame and that this was sometimes felt not just by monitored people, but also those around them. Yet some people experienced the opposite

reaction which was often tied in with class identity, community, and socialisation to criminal justice processes.

Beyond the form and function of the tag, the second section of this chapter began by exploring how the corporeal body becomes connected to a digital network, a site for regulation and control, and then the social body becomes subject to both short- and long-term normalising judgements about actions, labour, and lifestyles. The ‘fleshy situatedness’ (Law and Mol, 2004: 43) of EM raises interesting questions about the technology-body relationship and sheds new light on EM as physical punishment. As the previous subsection explored the social stigma of wearing a tag, this section reveals the physical, tactile dimensions: the friction, chaffing, squeezing, sweating, and rashes. EM also further entangled people in a hidden system of micro-penalties, mesh-thinning diversions, and penal add-ons.

The last research finding of this chapter considers the longer-term consequences of being subject to EM, the illusion of smooth transitions, the bumps and buffers experienced by participants as they attempted to find their own sense of normality, and the bureaucratisation of reformed subjectivity.

The aim of this chapter was to explore and address the research question of whether (and if so, how) EM changes penal supervision in the community. By exploring how penal surveillance is represented by different actors and the ways in which penal surveillance data is communicated within and outside the network, I argue that EM does reconstitute the community punishment experience in different ways, but that the divisions between digital supervision and other forms of more human-centred punishment are not clear cut.

The wearability of EM and its characterisation as a form of physical punishment point to unique and important aspects. Yet, the mechanics of power identified in this chapter resonate with those of other forms of punishment such as micro-penalties, mesh-thinning, and normalisation and regulation. In fact, it was clear that these adjacent systems of social control converged and overlapped at different sites. Building upon the findings from the two previous chapters, perhaps what this tells us is that EM is a distinct actor-network and that the Monitoring Centre is a distinct centre of calculation within a more expansive centre of calculation that constitutes the enactment of criminal justice and punishment in Scotland more broadly. The ways EM changes punishment then are through capillary powers of digitalisation and abstraction, the discretion of monitors, the commercialisation

of justice, and the intimacy and fleshiness of the EM experience. The system narratives generated within these relations are crafted into reports and circulated further afield on the peripheries and even outside of the network. The latter findings in this chapter demonstrate how this data leaks out in the form of background checks, disclosure procedures, and community gossip. This amounts to a more punitively compounding experience since leakage is long-term, meaning that penal surveillance continues to follow people long after the tag is removed.

Chapter Eight: Conclusion

The optics of EM?

Disentangling the networked governmentality of penal surveillance, this thesis provides new insights into how digital technology is enacted as a form of punishment in Scotland. By ‘following’ penal surveillance data and the construction of data narratives as they circulated and reconfigured across different sites and interactions across the network, experiences of both doing monitoring and being monitored are explored as situated, relational, and constrained by ‘techno-managerialist’ mechanisms of power (Paterson, 2014). The quantified and measurable outcomes of EM have been the focus of many studies, lending this penal system a veneer of reliability, neutrality, and scientific cleanliness that renders invisible the messy network of relations hiding behind the simplistic acronym of ‘EM.’ Unlike the archetypal ‘total institutions’ of criminological enquiry, penal surveillance emerges as more of a ‘careful plaiting of weak ties’ (Latour, 1996: 370). Although many people and things across the network communicated with one another, shared information, and transmitted data across great distances, truth and reality were fractured concepts that existed in ‘multiplicities,’ or even sometimes as fabricated narratives (Law, 2008: 13).

By framing EM as penal surveillance, it is worth reflecting on the optics of EM and on the sociological gaze more broadly. The findings of this study shine new light on digitally mediated punishment by exploring how EM renders those subject to it peculiarly visible to the state, as well as exposing the many complicated processes and practices that go into this visibility work. Lyon (2018) argues that watching and being watched have become ways of life and embedded in everyday practices, relations, and decisions. While Orwellian, top-down notions of Big Brother are deeply relevant to understanding surveillance, at the same time this thesis has demonstrated how on the ground it can be less about something external that happens to someone and more about how someone enacts it and lives with it every day. This is helpful for understanding the subtle difference between Nellis’ (2018b) concept of ‘coercive connectivity’ and my reinterpretation of it based on data from this study as ‘constrained connectivity.’ The original concept is ground-breaking for many reasons: it situates EM within the discourse of commercial and governmental data exploitation; it departs from the semantics of calling EM carceral and positioning it as just a side-show of the prison; instead, it centres the intense connectedness that comes from being digitally exposed and punitively surveilled (*ibid.*). This is important because it

is part of a larger growing body of work that is taking seriously the hidden and underestimated growth of supposed community-based alternatives (in all its human and digital forms) otherwise known as ‘mass supervision,’ ‘mass probation,’ or ‘mass penal control’ (Phelps, 2013; McNeill, 2019b).

Here again, *supervision* emphasises the relationship between social control and optics. There is plenty of literature and theory that captures this relationship, beginning with the all-seeing Panopticon (Foucault, 1977), but also branching out and fracturing further into other visions of penal control such as the Synopticon (Mathieson, 1997), the Ban-opticon (Bigo, 2008), the Nonopticon (Vaidhyathan, 2008), the Malopticon (McNeill, 2019a), or the Oligopticon (Latour, 2005). Amongst all of these ocular metaphors, it is worthwhile to consider why these are even relevant to understanding EM, given that the visual component of it compared to CCTV surveillance is not as obvious. After all, if we understand that ‘visibility is a trap’ then what does it mean when people are trapped by visibility that is seemingly non-visual, and in turn, the subjects of it are not physically seen (Foucault, 1977: 200)? I argue there are two interconnected responses to this. First, that this resonates somewhat with some of the various -opticon governance metaphors listed above that emphasise the limits of such a gaze. For example, McNeill’s (2019a) work on the ‘Malopticon’ is based on the metaphor of being seen ‘badly’ and in turn, being seen and represented as bad. This was touched upon towards the end of Chapter 7 as participants like Omar navigated the buffering effects of the penal system and felt misrecognised and unseen (*ibid.*). Similarly, Latour’s (2005) Oligopticon moves away from the totalist gaze of the Panopticon and instead, focuses on situated local sites that do not claim to be all-seeing ‘but what they do see, they *see it well*’ (*ibid.*: 181). This concept is intended to be a metaphor for the literal centres of calculation (such as the Monitoring Centre) which metaphorically extend outwards, connect far-removed sites and circulate knowledge thereby diffusing optics across all of these connections. This also implies that oligoptic power is situationally enacted as opposed to a monolithic force of power. This concept is quite relevant to understanding the diffusion of EM power. Yet, it still does not fully capture the non/optics of it.

This brings the discussion back to the second point I wish to make about visibility and visibility. While monitored people were not physically visible to those in the Monitoring Centre, the system software and transmission of data produced many visual markers, indicators, and textual versions of reality for EM Officers to see and study. Tasks were colour-coded, queued up on the computer screens, and accompanied by an initial version

of events about what had happened such a suspected tamper or six-second absence. Through processes of abstraction, the network rendered these invisible actions not just visible, but visual. Yet, the visualising process was revealed to be not just a way of describing realities, but an active part of producing and performing versions of realities, or as I refer to them throughout this thesis, system narratives. The visualising process, and more broadly the visibility and surveillance-work of EM, enacted realities rather than just reporting out-there phenomena. Oligoptic power is based on acknowledging the very limited scope of surveillance systems but also contends that the enactment of this surveillance is therefore high quality and that the connections are stabilised (Latour, 2005). While I do argue that EM is a limited surveillance system, findings from this study indicate that it also concealed a lot of uncertainties, left room for discretionary powers, that it absorbed a great deal of ancillary/non-essential data, and that faint or faulty connections were not exceptional problems but everyday occurrences. Penal surveillance narratives generated within the network were persuasive and communicated compelling versions of events, but to consider EM as an oligoptica would be to further perpetuate the image it projects as infallible, clean, and stable.

Therefore, rather than shoe-horning the optics of EM into a predefined, prescriptive - opticon concept, I leave this as open-ended. The aim of this study was to open up and untangle the networked governance of EM, which it has, and to put a totalising label on the optics of it would arguably close it back down. More so, while the optics of EM are important, this thesis has revealed other ways of making EM visible by moving beyond the visual to other sensory engagement such as the sounds of EM and the touch of EM. While the visual remains important, a growing body of work around other sensory and affective ways of knowing (Pink, 2009; Herrity *et al.*, 2021) makes a compelling argument for not defining power by optics alone.

Summary of thesis

In many ways, this thesis is an exercise in *sousveillance*. While the question of what penal surveillance makes visible is an integral part of this study, it also addresses the inverse question of what we can make visible *about* penal surveillance.

As covered in **Chapter One: An introduction**, I situated how and why I came to undertake this research, the key argument developed as a result of carrying out this study, and how it makes an original contribution to knowledge. The aim of this research was to untangle the

networked governmentality of penal electronic monitoring in Scotland to better understand how digital technology is used to punish people. In order to meet this aim, I outlined three broad research questions which have each been addressed in turn in Chapters 5 – 7.

Chapter Two: *Making sense of electronic monitoring*, included an overview and literature review to situate different ways of knowing EM. I argued that this project was timely due to the recent introduction of new legislation in Scotland that will extensively expand the use of EM as well as the use of newer and more intrusive EM technologies such as GPS which raise important questions about privacy and proportionality. This chapter also included a review of academic research and literature on EM, in which I identify four particular paradigms of research on the topic that have contributed to the larger body of knowledge on EM in different ways. While EM as a topic cannot exactly be considered under researched, I argue that there are some epistemological and ontological assumptions or patterns across many ways of knowing EM that continue to limit our understandings of it as a ‘technosocial’ punishment (Brown, 2006).

In **Chapter Three:** *Retheorising penal surveillance*, I outlined the ways I use and refine theories and concepts to situate ways of exploring EM. The structure of this chapter outlined Foucauldian, poststructuralist ways of thinking critically about punishment, surveillance, and governmentality, but also challenged the confines of this way of thinking by integrating into the discussion my interpretations of theories and concepts from Science and Technology Studies and actor-network theory. By combining and building together different aspects of these theoretical approaches to research, new ways of thinking about power and technology emerge. I outlined the lineage of Science and Technology Studies and actor-network approaches to research which are gradually becoming more familiar to criminological research but still remain on the periphery theoretically and methodologically. Amidst theories of power, linked with the concepts of governmentality and active subjectivity, there is often a normative and/or neutral view adopted towards the role and value of technologies. Yet, in breaking these concepts open and combining them with additional ways of thinking informed by actor-network theory, I set out new ways of studying and thinking about the relationships between power, punishment, and technologies.

Chapter Four: *Methods, reflections, and being the familiar stranger*, detailed my methodology and methods of data collection and analysis. The first section outlined my methodological approach, including the influences of both the Chicago School and actor-

network theory. This chapter then goes further into the participant observation and unstructured interviews carried out as data collection methods. For each of these, I reflect on the literature that informed each of these methods, their significance, the negotiation of access/recruitment (how I got ‘in’ and how I was kept ‘out’) and reflecting on the ethics of each method and the research process in general.

After these chapters, the next three detail the findings from this research. **Chapter Five:** *‘Confirmed by default’: System narratives and networked penal surveillance* is the first of these chapters. The findings from this chapter address the first research question by identifying the ways in which different people and technologies in this system of penal surveillance come together and relate to one another. Spread out over time and space, The Company relied on processes of abstraction and translated inscriptions to construct versions of realities that I argue circulate through the network as over-simplified and stretched-out ‘system narratives.’ Queues, colour-coding, ranges, grace periods, and ‘default’ confirmations were all different techniques and technologies used by The Company to efficiently organise, sort through, and resolve the flurry of surveillance data that flowed up-stream to their centre of calculation. Yet, techniques and technologies did not just simplify some external notion of the ‘real’ EM but actively constituted and enacted it as a practice. Such narratives often went beyond just describing situations and instead, reconstituted versions of reality that were interpreted as more reliable and quantifiable than that of untrustworthy humans. As differently situated people and technologies connected with one another, they had technosocial effects that were the product of both machine automation and human discretion.

Chapter Six: *The constraints and intimacies of penal surveillance in everyday life*, continued the analysis by unseating the narrative of EM as a better-alternative, automated, and clean form of punishment. The findings of this chapter primarily address the second research question by exploring how different actors experienced and/or enacted EM, which speaks to the everyday negotiations, practices, and rhythms that were reconfigured by this distinct digital connection. By focusing on what it was like to be monitored and what it was like to do monitoring, it revealed the interrelations and unique intimacies between these two seemingly oppositional experiences and differently situated actors. In some ways, both the monitored and the monitors were left to negotiate a variety of constrained freedoms which came to define their experiences of penal surveillance and were deeply embedded in their everyday lives and practices. EM felt less like a hegemonic and

totalising punishment and more like a series of small, latent, accumulated moments that gripped people in different ways (and at different times of the day/night).

Chapter Seven: *Through a glass, darkly: Power, representation, and the mystification of penal surveillance*, is the final findings chapter. The aim of this chapter was to explore and address the third research question of whether (and if so, how) EM changes penal supervision in the community. By exploring both how penal surveillance is represented by different actors and the ways in which penal surveillance data is communicated within and outside the network, I argue that EM does reconstitute the community punishment experience in different ways, but that the divisions between digital supervision and other forms of more human-centred punishment are not clear cut. The wearability of EM and its characterisation as a form of physical punishment is a unique and important point. Yet, the mechanics of power identified in this chapter resonate with those of other forms of punishment such as micro-penalties, mesh-thinning, and normalisation and regulation. The ways EM changes punishment then are through capillary powers of digitisation and abstraction, the discretion of monitors, the commercialisation of justice, and the intimacy and fleshiness of the EM experience. The system narratives generated within these relations are crafted into reports and circulated further afield on the peripheries and even outside of the network, leaked out in the form of employment disclosure and background checks, by neighbourly gossip, or by the information communicated by the material form of the tag itself. These communicative, representational, and bodily aspects of digitally mediated punishment make visible the hidden ways that EM changes penal supervision. These findings undo the veneer of neutrality, straightforwardness, and cleanliness that is often associated with technological solutions.

Finally, this current chapter, **Chapter Eight:** *Conclusion*, provides a reflective discussion out the optics of EM and power, summarises of the thesis structure, clarifies the key contributions of this work, and considers the limitations and future possibilities of this new knowledge.

Key contributions

A major contribution of this thesis is to the body of scholarship on penal electronic monitoring and the intersection of punishment and surveillance more broadly. Both Gacek (2018) and Berry (2019) have recently studied EM in the United Kingdom, although focussing on different aspects than what will be covered here. These studies have explored

the nature of EM through the lenses of carceral territory and experiences of being under benevolent surveillance. Instead, this thesis constitutes the first in-depth immersive study focussed on human and more than human enactments of EM including those who do monitoring and those who are monitored, and in doing so, cracks open the ‘black box’ of what EM is about in rich detail. I situate EM as a heterogenous and messy network of relationships, and as a set of enacted and intimate performances embedded in every practices, and as a ‘fleshy’ bodily punishment (Mol and Law, 2004: 43). By drawing on different ways of thinking about and studying how punishment is mediated by digital technologies, this thesis reveals the – at times - surprising, less obvious, and strange ways that technology shapes our penal actions, thoughts, and experiences, as well as how penal contexts shape technology. In so doing, the thesis contributes to debates in criminology about the expanding role of digital technologies in the criminal justice system and the penal character of electronic monitoring.

This thesis also makes an original theoretical and methodological contribution to criminological research by drawing upon ways of thinking about the world, largely informed by Science and Technology Studies and actor-network theory which are not yet integrated into mainstream ways of thinking about crime and punishment. By putting to work a ‘technosocial’ approach to research, I demonstrate how we can see past EM as a mere tool, and as a panacea to social problems, which can expand our understandings of digital systems and penal technologies more broadly (Brown, 2006). EM constitutes a whole system of relations, a constant circulation of people, objects, things, places, spaces, and truths which are enacted in everyday contexts but which also distribute power, reflect governance, and enact subjectivity. I have introduced original concepts such as constrained connectivity, system narratives, the digital penal avatar, and penal add-ons amongst others to convey some of the many ways that people shape technology and technology shapes us.

Lastly, I make an empirical contribution to the growing criminological literature on the intersection of data, control, and surveillance. By ‘following’ penal surveillance data across the EM network, I demonstrate how it is constantly renegotiated, how it fractured, solidified, accumulated, and stabilised. Sometimes penal surveillance data contradicted itself, fabricated narratives, said too much or not enough, or overrode common sense. This builds on Nellis’ (2018b) work on coercive connectivity and the relationship between digital exposure and digital exploitation, but it also speaks to broader criminological research on datafied justice and ways that these digital traces live on and can cause harm (see Brayne, 2014, 2017; Hannah-Moffat, 2019; Wood, 2020; Ugwudike, 2020; Lageson,

2020). This is a powerful thread of academic that reveals the persuasiveness, breadth, and longevity of penal surveillance data.

My contribution towards this empirical work includes illustrating how EM acts through capillary powers of digitalisation and abstraction, the discretion of monitors, the commercialisation of justice, and the intimacy and fleshiness of the EM experience. The system narratives generated within these relations are crafted into reports and circulated further afield on the peripheries and even outside of the network. The earlier findings in this thesis demonstrate how such ‘narratives’ are generated, mediated, and made durable while latter findings explore how this data leaks out in the form of background checks, disclosure procedures, and even the material form of EM hardware. This amounts to a more punitively compounding experience since leakage is long-term, meaning that penal surveillance continues to follow people long after the tag is removed.

While this thesis did not set out to evaluate, review or assess EM, nor make reformatory recommendations for the sake of further expanding its use, I have provided sufficient evidence to suggest that EM is a punitive measure and the integration of it into a wider and more ‘progressive’ package of rehabilitative supervision should be acknowledged, perhaps simultaneously, as a move towards making community justice in Scotland more punitive. Before we begin buying into the cultural appeal of technological solutions to social problems, there are fundamental questions we need to answer about the purpose of punishment in contemporary Scottish society and whether EM is truly the best we can do.

Present limitations, future possibilities

Like any research study, this study has its limitations. The nature of reflexive ethnographic research in general always represents a situated and partial perspective of the phenomena being studied. My positionality, background, identity, interpretations, and actions have all been integral aspects of the way I enacted this ethnography and I have made an effort throughout the different stages of fieldwork and different chapters of this thesis to reflect on that in different ways and engage with it. Rather than frame this strictly a limitation, however, I argue it is one of the many reasons why ethnography is such a rich and powerful way of conducting research. Drawing on the work of Jackson and Mazzei (2012), research is an assemblage of many parts, texts, components, ideas, and people that have all been ‘plugged in’ in order to produce new knowledge. Were someone else to be plugged in

instead of myself, it would be an entirely new assemblage and they would produce their own situated and partial knowledge engendering multiple ways of better knowing EM.

The process of recruiting interview participants was a challenging stage of fieldwork during this study and required several changes and adaptations on my part, including reassessing and reflecting on the commitment of participation and what we as researchers ask of our participants. I had begun recruitment with a different method in mind which would have involved much more commitment from participants, but also perhaps better rapport and the chance to revisit certain topics if a more longitudinal approach had been feasible.

Nevertheless, I adapted my methods in order to complete fieldwork on time and received many more responses to the new call for participants. One apparent limitation of the sample of people I interviewed was that there was no gender diversity and while I did meet quite a diverse group of people during ride-alongs with Field Officers and had several responses from women to my call for interview participants, the 10 people that ultimately agreed to meet with me all identified as men. That is not to say that this was not a diverse group in other ways, racially, ethnically, religiously, geographically, educationally, and by age, but it is important to acknowledge this limitation, nonetheless. It is also worth reflecting on whether the ways I largely advertised this call online, in addition to the fact that my forename is androgenous/masculine, might have impacted how people perceived this study and me as a researcher.

In many respects, this research has only begun to open up and dig into EM. This study has untangled the networked governance of EM and explored many of the relations and actors involved in operationally doing monitoring and being subject to monitoring. Yet, there are still many more ways to explore penal surveillance, new objects to ‘follow,’ and several research questions that can be formed based even just on the findings from this study. For example, where would one end up if they continued following penal surveillance data upstream? It would also be interesting to study the broader commercialisation of penal technologies, such as doing an ethnography of ‘technocorrection’ conferences and trade shows. Another suggestion, to expand upon the findings of this research, would be to carry out a similar study once GPS- and RAM-based technologies are more widely introduced in Scotland.

Final thoughts

Having exited the field in November 2019 and taken time to sit with and analyse the data I had collected, this thesis was largely written throughout the Covid-19 pandemic. While such an intense writing period leaves one to reflect on big questions about research, justice, and society, this was unsurprisingly intensified by the worldwide lockdown and way that society as we had known it ground to a halt. Immersing myself in the data was somewhat comforting, like a time capsule which was untainted by the ongoing (but unequally experienced) uncertainties in all of our daily lives. Justice processes and sentencing were interrupted, leaving many in limbo, forgotten, and institutionally abandoned (see Casey *et al.*, 2021). People in prison were locked in their cells for 23 hours per day and people under supervision were left in a bureaucratic grey zone as not-yet sentenced or not-yet progressed for months. I reached out to my gatekeeper to see how The Company was coping and what all of this meant for EM, but given the suspension of court dates, she had been indefinitely furloughed.

Lockdown has contributed towards deepening forms of social and justice inequality (see Scotland in Lockdown, 2020). Moving on from this study, it is more important than ever that as researchers we ask difficult questions and continue to critically engage with how penal systems exercise power over people. The findings in this study have demonstrated how latent, subtle, and routine these exercises of power can be and the ways that they gradually reconfigure the texture of everyday life. A lesson from this study, then, is to continue to unseat settled narratives about the ways in which we punish people and to make the familiar strange. By exploring EM in this way, I have revealed a messy, complex, and discretionary web of situated relations between people and technology, but also shown how people exercised resistance and found ways to personalise and own their experience. I hope that, in a sense, I have seen and shown EM in much more of its technosocial complexity, allowing us to see more than the mere data-double it often projects.

Appendices

Appendix A: Letter of ethical approval from the University of Glasgow's College of Social Sciences Ethics Committee



College of Social
Sciences

Tuesday, 23 October 2018

Dear Ryan Casey

College of Social Sciences Research Ethics Committee

Project Title: The lived experience of electronic monitoring

Application No: 400180025

The College Research Ethics Committee has reviewed your application and has agreed that there is no objection on ethical grounds to the proposed study. It is happy therefore to approve the project, subject to the following conditions:

- ☐ Project end date: ____10.01.2021____
- ☐ The data should be held securely for a period of ten years after the completion of the research project, or for longer if specified by the research funder or sponsor, in accordance with the University's Code of Good Practice in Research:
(http://www.gla.ac.uk/media/media_227599_en.pdf) (Unless there is an agreed exemption to this, noted here).
- ☐ The research should be carried out only on the sites, and/or with the groups and using the methods defined in the application.
- ☐ Any proposed changes in the protocol should be submitted for reassessment as an amendment to the original application. The *Request for Amendments to an Approved Application* form should be used:
<http://www.gla.ac.uk/colleges/socialsciences/students/ethics/forms/staffandpostgraduateresearchstudents/>

Yours sincerely,

Dr Muir Houston
College Ethics Officer

Muir Houston, Senior Lecturer
College of Social Sciences Ethics Officer
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Appendix B: Participant Information Sheet for Field Officers



School of Social &
Political Sciences

Participant Information Sheet for Participant Observation (Field Officer)

Invitation to participate in a research study called:

Title of study: 'The Lived Experience of Electronic Monitoring'

Name of researcher: Ryan Casey

Supervisors: Prof. Fergus McNeill and Dr. Alistair Fraser

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Thank you for reading this.

Researcher background

My name is Ryan Casey, I am a postgraduate research student at the University of Glasgow. As part of my PhD project in Criminology, I would like to better understand the experience of what electronic monitoring is like from the point of view of the people subject to wearing monitors ('tags') and the people responsible for delivering and enforcing the monitoring service.

Purpose

The purpose of this research is to better understand the everyday experience of what it is like to be electronically supervised, from the point of view of all the different people that influence how it can be experienced or enforced.

Involvement

I am looking for potential participants in this project. In order to be involved, I would like to observe your work environment and the activities carried out by you and your colleagues. I will shadow you for the duration of your shift and intend to do this observational fieldwork occasionally over the next several months. I will mostly be quietly accompanying you and observing what house visits may be like for both you and service users, but I may ask a few questions and take some notes. No one will know if you agree to participate or not.

If you have ever been involved in a research project before, you might have received some kind of award or payment for getting involved. Just to ensure there are no misunderstandings, I cannot reward or pay you for your involvement. But please know that I am very grateful for your participation.

Your Safety

Your safety and comfort is the biggest priority. This project does not pose any serious or direct threat to your safety or health, but if there is any way for me to make this a safer space for you, or if there is something about the study I am conducting that is making you uncomfortable, please let me know.

Privacy and Data

Your personal data will be handled with great care and security. Any notes taken will be stored in secure places and eventually destroyed. Your personal details including your name, location, and any other personal information that may reveal your identity will be anonymised through the use of pseudonyms. Please note that assurances on confidentiality will be strictly adhered to unless evidence of wrongdoing or potential harm is uncovered. In such cases the University may be obliged to contact relevant statutory bodies/agencies.

The data collected from your involvement will be transcribed and analysed. It will be used for my PhD thesis, which will be published. It is also possible that the data will be used for publication in other forms such as articles, conference papers, books, or written summaries. If requested, results can be made available to you as a written summary, verbal presentation, or representative presentation.

Your data will be stored on a secure external storage file until the project is complete. Once my PhD thesis is published, I will subject all of my data to a retention management plan and gradually erase data over time. After 10 years, all of the data from this project will be disposed of.

Withdrawal Policy

You have the right to withdraw from this project at any time without prejudice or judgement. You do not even have to provide a reason. Unless you state otherwise, I will destroy all data you provided up until the point you withdrew consent.

This project has been considered and approved by the College Research Ethics Committee.

If you need to contact the researcher, please phone her at 330 6344/6224 or email her at r.casey.1@research.gla.ac.uk. Her supervisors can be reached at Fergus.McNeill@glasgow.ac.uk or Alistair.Fraser@glasgow.ac.uk.

For further information and where to pursue any complaint: please contact the College of Social Sciences Ethics Officer, Dr Muir Houston, email: Muir.Houston@glasgow.ac.uk

Appendix C: Consent Form for EM Officers



CONSENT FORM PARTICIPANT OBSERVATION – EM STAFF/OFFICERS

Title of project: The Lived Experience of Electronic Monitoring

Name of Researcher: Ryan Casey

It is important that you only take part in this study if you want to and that you understand what taking part will involve.

This form should only be signed once you have had time to read the Participant Information Sheet provided, and that you have asked any questions you may have.

1. I confirm that I have read and understand the Participant Information Sheet for the above study and have had the opportunity to ask questions.
2. I agree that my participation is voluntary and I understand that I am free to withdraw at any time, without giving any reason, and without notifying my employer. I also understand that I do not need to respond to questions that I do not want to answer, without giving any reason.
3. I understand data I provide may be directly quoted, although it will be attributed to a pseudonym. I also understand that any direct or indirect personal data which may reveal my identity will not be revealed in any publication related to this research and I consent to the measures taken to secure confidentiality and anonymity.

Name of Participant	Date	Signature
Name of Researcher	Date	Signature

Appendix D: Flyer/Information Sheet for ride-along visits



School of Social &
Political Sciences

INFORMATION SHEET

Title of study: The Lived Experience of Electronic Monitoring

Name of Researcher: Ryan Casey

Supervisors: Prof. Fergus McNeill and Dr. Alistair Fraser

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Thank you for reading this.

Researcher background

My name is Ryan Casey, I am a postgraduate research student at the University of Glasgow. As part of my PhD project in Criminology, I would like to better understand the everyday experience of what it is like for people who are being electronically monitored ('tagged') as part of a community sentence or a Home Detention Curfew.

Purpose

The purpose of this research is to better understand the everyday experience of what it is like to be electronically supervised, from the point of view of people who are going through it right now, as well as the staff at G4S who are responsible for enforcing it.

Involvement

I am shadowing field officers from G4S in order to study home visits with clients such as yourself. This is a one-time visit and I will not be collecting any personal information about you or where you live. I may write some notes about this visit or ask you a question, but your identity will remain anonymous whether you choose to participate or not. With the exception of the officer present during this visit, no one will even know whether you agree or not to participate.

If you have ever been involved in a research project before, you might have received some kind of award or payment for getting involved. Just to ensure there are no misunderstandings, I

cannot reward or pay you for your involvement. But please know that I am very grateful for your participation.

Your Safety

Your safety and comfort is the biggest priority. This project does not pose any serious or direct threat to your safety or health, but if there is any way for me to make this a safer space for you or if there is something about this study making you uncomfortable, please let me know or ask me to leave.

Privacy and Data

Your personal data will be handled with great care and security. Any notes will be stored in secure places and eventually erased. No personal details including your name, location, and any other personal information that may reveal your identity will be collected. You may be referred to by pseudonym in a future publication, but no personal information will be included. Please note that assurances on confidentiality will be strictly adhered to unless evidence of wrongdoing or potential harm is uncovered. In such cases the University may be obliged to contact relevant statutory bodies/agencies.

The data collected from your involvement will be transcribed and analysed. It will be used for my PhD thesis, which will be published. It is also possible that the data will be used for publication in other forms such as articles, conference papers, books, or written summaries. Results can be made available upon request.

Your data will be stored on a secure external storage file until the project is complete. Once my PhD thesis is published, I will begin to gradually erase all data related to this study. After 10 years, all of the data from this project will be disposed of.

Withdrawal Policy

You have the right to withdraw from this project at any time without prejudice or judgement. You do not even have to provide a reason. Unless you state otherwise, I will destroy all data you provided up until the point you withdrew consent.

This project has been considered and approved by the College Research Ethics Committee.

If you need to contact the researcher, please phone her at 330 6344/6224 or email her at r.casey.1@research.gla.ac.uk. Her supervisors can be reached at Fergus.McNeill@glasgow.ac.uk or Alistair.Fraser@glasgow.ac.uk.

For further information and where to pursue any complaint: please contact the College of Social Sciences Ethics Officer, **Dr Muir Houston**, email: Muir.Houston@glasgow.ac.uk

Appendix E: Verbal Consent Log Template



School of Social &
Political Sciences

WITNESSED VERBAL CONSENT LOG – RIDE ALONG

Title of project: The Lived Experience of Electronic Monitoring

Name of Researcher: Ryan Casey

Supervisors: Professor Fergus McNeill & Dr. Alistair Fraser

Participant #1	Date: Time:
<input type="checkbox"/> I confirm that I witnessed the participant verbally agree to take part in this study voluntarily after reading and understanding the Information Sheet at/on the above time/date. Signature: _____	<input type="checkbox"/> I confirm that I witnessed the participant verbally agree to take part in this study voluntarily after reading and understanding the Information Sheet at/on the above time/date. Signature: _____
Participant #2	Date: Time:
<input type="checkbox"/> I confirm that I witnessed the participant verbally agree to take part in this study voluntarily after reading and understanding the Information Sheet at/on the above time/date. Signature: _____	<input type="checkbox"/> I confirm that I witnessed the participant verbally agree to take part in this study voluntarily after reading and understanding the Information Sheet at/on the above time/date. Signature: _____
Participant #3	Date: Time:
<input type="checkbox"/> I confirm that I witnessed the participant verbally agree to take part in this study voluntarily after reading and understanding the Information Sheet at/on the above time/date. Signature: _____	<input type="checkbox"/> I confirm that I witnessed the participant verbally agree to take part in this study voluntarily after reading and understanding the Information Sheet at/on the above time/date. Signature: _____

Appendix F: Participant Information Sheet for EM Officers (Office based)



School of Social &
Political Sciences

Participant Information Sheet for Participant Observation (G4S)

Invitation to participate in a research study called:

Title of study: 'The Lived Experience of Electronic Monitoring'

Name of researcher: Ryan Casey

Supervisors: Prof. Fergus McNeill and Dr. Alistair Fraser

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Thank you for reading this.

Researcher background

My name is Ryan Casey, I am a postgraduate research student at the University of Glasgow. As part of my PhD project in Criminology, I would like to better understand the experience of what electronic monitoring is like from the point of view of the people subject to wearing monitors ('tags') and the people responsible for delivering and enforcing the monitoring service.

Purpose

The purpose of this research is to better understand the everyday experience of what it is like to be electronically supervised, from the point of view of all the different people that influence how it can be experienced or enforced.

Involvement

I am looking for potential participants in this project. In order to be involved, I would like to observe your workplace/work environment and the activities carried out by you and your colleagues. I will be here for the duration of the current work shift, and will come back to do this occasionally over the next several months. I will mostly be quietly observing how the different roles within the company operate, but I may ask a few questions and take some notes. No one will know whether you agree to participate or not.

If you have ever been involved in a research project before, you might have received some kind of reward or payment for getting involved. Just to ensure there are no misunderstandings, I cannot award or pay you for your involvement. But please know that I am very grateful for your participation.

Your Safety

Your safety and comfort is the biggest priority. This project does not pose any serious or direct threat to your safety or health, but if there is any way for me to make this a safer space for you, or if there is something about the study I am conducting that is making you uncomfortable, please let me know.

Privacy and Data

Your personal data will be handled with great care and security. Any notes taken will be stored in secure places and eventually destroyed. Your personal details including your name, location, and any other personal information that may reveal your identity will be anonymised through the use of pseudonyms. Please note that assurances on confidentiality will be strictly adhered to unless evidence of wrongdoing or potential harm is uncovered. In such cases the University may be obliged to contact relevant statutory bodies/agencies.

The data collected from your involvement will be transcribed and analysed. It will be used for my PhD thesis, which will be published. It is also possible that the data will be used for publication in other forms such as articles, conference papers, books, or written summaries. If requested, results can be made available to you as a written summary, verbal presentation, or representative presentation.

Your data will be stored on a secure external storage file until the project is complete. Once my PhD thesis is published, I will subject the data to a retention management plan so it can be gradually erased. After 10 years, all of the data from this project will be disposed of.

Withdrawal Policy

You have the right to withdraw from this project at any time without prejudice or judgement. You do not even have to provide a reason. Unless you state otherwise, I will destroy all data you provided up until the point you withdrew consent. If you would prefer your employer to not know whether you participate, refuse, or withdraw, please speak to me privately so I can exclude any data involving you.

This project has been considered and approved by the College Research Ethics Committee.

If you need to contact the researcher, please phone her at 330 6344/6224 or email her at r.casey.1@research.gla.ac.uk. Her supervisors can be reached at Fergus.McNeill@glasgow.ac.uk or Alistair.Fraser@glasgow.ac.uk.

For further information and where to pursue any complaint: please contact the College of Social Sciences Ethics Officer, **Dr Muir Houston**, email: Muir.Houston@glasgow.ac.uk

Appendix G: Twitter advertisement



Call for Participants: A study into the lived experience of being electronically monitored (tagged) in Scotland

What is the research about?

The aim of this research is to better understand the everyday experience of being electronically monitored, from the point of view of people who are going through it right now or have in the past.

What does the research involve?

You will be asked to take part in an interview. Time and place can be arranged so that it is convenient for you. There is no payment or reward for getting involved, but please know that I am very grateful for your voluntary participation.

Who can take part?

I would like to speak to anyone, over 18 years old, who has been subject to court or prison-ordered electronic monitoring in Scotland.

If you are interested in taking part in the study or would like more information, please contact Ryan Casey via Twitter DM (@rcasey_), email (r.casey.1@research.gla.ac.uk), or call/text 07523 295670.

This study is funded by the College of Social Science at the University of Glasgow.

Appendix H: Participant Information Sheet for Interviews



Participant Information Sheet for Interviews

Invitation to participate in a research study called:

Title of study: 'The Lived Experience of Electronic Monitoring'

Name of researcher: Ryan Casey

Supervisors: Prof. Fergus McNeill and Dr. Alistair Fraser

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Thank you for reading this.

Researcher background

My name is Ryan Casey, I am a postgraduate research student at the University of Glasgow. As part of my PhD project in Criminology, I would like to spend time with and speak to people who are being electronically monitored ('tagged') as part of a community sentence.

Purpose

The purpose of this research is to better understand the everyday experience of what it is like to be electronically supervised, from the point of view of people who are going through it right now or have in the past, as well as those involved in relevant third sector organisations.

Involvement

I am looking for potential participants in this project. In order to be involved, I would like to meet and interview you approximately 5 times over the course of several weeks. You can expect each interview to last approximately 40 – 60 minutes. No one will know whether or not you agree to participate.

If you decide to participate, I may invite you to take part in a photography activity for the study. But this will be entirely your decision and it is something we can discuss more if you decide to get involved.

If you have ever been involved in a research project before, you might have received some kind of reward or payment for getting involved. Just to ensure there are no misunderstandings, I cannot award or pay you for your involvement. But please know that I am very grateful for your participation.

Your Safety

Your safety and comfort is the biggest priority. This project does not pose any serious or direct threat to your safety or health, but if there is any way for me to make this a safer space for you, please let me know.

Privacy and Data

Your personal data will be handled with great care and security. Any recordings or notes will be stored in secure places and eventually erased. Your personal details including your name, location, and any other personal information that may reveal your identity will be anonymised through the use of pseudonyms. Please note that assurances on confidentiality will be strictly adhered to unless evidence of wrongdoing or potential harm is uncovered. In such cases the University may be obliged to contact relevant statutory bodies/agencies.

The data collected from your involvement will be transcribed and analysed. It will be used for my PhD thesis, which will be published. It is also possible that the data will be used for publication in other forms such as articles, conference papers, books, or written summaries. If requested, results can be made available to you as a written summary, verbal presentation, or presentation for representatives.

Your data will be stored on a secure external storage file until the project is complete. Once my PhD thesis is published, I will subject all of my data to a retention management plan in order to gradually erase data over time. After 10 years, all of the data from this project will be disposed of.

Withdrawal Policy

You have the right to withdraw from this project at any time without prejudice or judgement. You do not even have to provide a reason. Unless you state otherwise, I will destroy all data you provided up until the point you withdrew consent.

This project has been considered and approved by the College Research Ethics Committee.

If you need to contact the researcher, please phone her at 330 6344/6224 or email her at r.casey.1@research.gla.ac.uk. Her supervisors can be reached at Fergus.McNeill@glasgow.ac.uk or Alistair.Fraser@glasgow.ac.uk.

For further information and where to pursue any complaint: please contact the College of Social Sciences Ethics Officer, **Dr Muir Houston**, email: Muir.Houston@glasgow.ac.uk

Appendix I: Consent Form for Interviews



CONSENT FORM - INTERVIEWS

Title of project: The Lived Experience of Electronic Monitoring

Name of Researcher: Ryan Casey

It is important that you only take part in this study if you want to and that you understand what taking part will involve.

This form should only be signed once you have had time to read the Participant Information Sheet provided, and that you have asked any questions you may have.

1. I confirm that I have read and understand the Participant Information Sheet for the above study and have had the opportunity to ask questions.
2. I agree that my participation is voluntary and I understand that I am free to withdraw at any time, without giving any reason. I also understand that I do not need to respond to questions that I do not want to answer, without giving any reason.
3. I have been told that any direct or indirect personal data which may reveal my identity will not be revealed in any publication related to this research and I consent to the measures taken to secure confidentiality and anonymity.
4. I understand that data I provide may be directly quoted, although it will be attributed to an anonymised pseudonym.

☐ I consent to interviews being digitally recorded (audio only).

Name of Participant	Date	Signature

Name of Researcher	Date	Signature

Appendix J: NVivo nodes used for data analysis

Codes			
+	Name	Files	References
	Better thans	2	2
	Relationships are codes that represent relationships between project items typically cases, codes or files).	4	6
		1	3
	Freedom	13	78
	Feeling lost	11	24
	Substance use, Mental health	9	23
	Information access	10	40
	Lack of information	1	1
	Lore	4	5
	Strategic concealment (Disinfo)	0	0
	Performative disguise	0	0
	Representation of self	1	1
	Representation of The Company	0	0
	Technique for oppressing	0	0
	Representations of Compliance	14	105
	Space & Belonging	13	89
	Community	7	15
	Surveillance & Power	13	83
	Authority	9	17
	Paternalistic	1	1
	The Network	9	22
	Extending out	8	14
	The Company	12	31

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